

CLIMATOLOGICAL DATA

NATIONAL SUMMARY

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Environmental Data Service

JANUARY

1974

Volume 25

No. 1

Chapel Hill, N.C.

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NOTE: Late reports and corrections will be carried in the June and December issues of this publication. An explanatory page "Description of Charts" will be carried in the January and July issues.

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William H. Haggard
Director, National Climatic Center

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NATIONAL SUMMARY

JANUARY 1974

GENERAL SUMMARY OF WEATHER CONDITIONS

Dr. Richard E. Felch, Climatologist

HIGHLIGHTS:

1. With the exception of the Central Great Plains and the Rocky Mountain States, most of the Nation averaged warmer than normal.
2. Heavy precipitation fell in the Mississippi Valley and parts of the West, light in the Plains States and Florida, and close to normal elsewhere.

TEMPERATURE: Extremes were the general rule over the Nation with record cold the first two weeks, and record warmth the last two in most areas. Overall, temperatures averaged 3° to 12° warmer than normal east of the Mississippi and 1° to 4° warmer in parts of the Far West. The Central Great Plains and Rocky Mountain States averaged 3° to 6° below normal. The weather provided a big boost to those concerned with heating fuel supplies since 8 out of 10 homes are located in the warmer than normal areas.

Extreme cold gripped most of the Nation during first two weeks as a series of high pressure systems pushed frigid Arctic air to our southern borders. Temperatures averaged at least 10° below normal from the Sierras to the Appalachians, and more than 30° below normal in parts of Wyoming, Colorado, and Nebraska. On New Year's Day morning, International Falls, Minnesota, registered a cool -38°. The week ending on the 6th averaged -9° at Casper, Wyoming, 32° below normal. The first seven days of January were the coldest in 43 years of record at Kansas City. Bismarck, North Dakota, registered -40° on the 10th, and -42° on the 12th.

At mid-month a warming trend began which quickly broke one of the long cold spells of record in the Plains States. Sheridan, Wyoming, reached 70° and Pendleton, Oregon, 68°, on the 15th, at each station the warmest January temperature on record.

The last decade of the month continued exceptionally warm as temperatures averaged 6° to 18° above normal over most of the Nation. Many all-time high temperature records were broken as warm tropical air dominated the weather picture.

PRECIPITATION: Total precipitation was about normal over most of the Nation. Unusually heavy precipitation was confined to the length of the Mississippi River Valley and parts of the Desert Southwest. The northern and southern portions of the Great Plains and eastern Oregon and Nevada were the only areas much drier than normal. Heaviest amounts included 12.69 inches (318 percent of normal) at Lake Charles, Louisiana, 18.15 inches at Vicksburg, Mississippi, and 15.41 inches at Mullan, Idaho. The Oregon-Washington coast received 12 to 14 inches, which is slightly above normal. Las Vegas, Nevada, received only 2 inches, but this is four times the normal rainfall and the wettest ever since 1949 when a record 2.41 inches fell. Parts of four States in a band stretching eastward from Las Vegas received at least three times the expected rainfall.

The first two weeks saw light precipitation over much of the Country except for parts of the southeast and southern California. At least 2 inches fell from the Louisiana coast northeastward into Kentucky and the Carolinas. A Low pressure system moved down along the California coast, bringing unusually heavy rains to southern portions of the State and as far inland as Nevada and Arizona. Los Angeles, California, received 5.57 inches of rain in 2 days and a total of 8.35 inches for the month. This heavy precipitation continued into the second week of the month.

Heavy rains of 2 inches or more each week persisted through the month in the Lower Mississippi River Valley. By mid-month more typical weather returned to the Southwest, but rainfall increased along the Washington coast. During the last week considerable severe weather and flooding occurred in Louisiana, Mississippi, and northeastward through Appalachia.

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES

JANUARY 1974

STATE	Temperature						Precipitation				
	Monthly extremes						Monthly extremes				
	Station	Highest °F	Date	Station	Lowest °F	Date	Station	Greatest In.	Station	Least In.	
Alabama	3 Stations	81	29+	Florence	- 16	13-	Red Bay	15.68	Fort Morgan	2.16	
Alaska	Kake	51	25	Prospect Creek Camp	- 60	28	Little Port Walter	12.35	8 Stations	.00	
Arizona	2 Stations	84	16	Dinshoto	- 25	3	Sunrise Mountain	6.26	San Simon 9 ESE	.38	
Arkansas	Stamps	77	31	Harrison	- 4	1	Monticello 3 SW	11.18	Fayetteville Exp. Station	.88	
California	E1 Centro 2 SSW	87	17	Bodie	- 25	3	Canadero 3 W	24.84	Tulelake	.35	
Colorado	Evergreen	74	16	Kremmling	- 46	4	Wolf Creek Pass 1 E	6.78	Brandon	.02	
Connecticut	Stamford 5 N	68	27	Coventry	- 13	14	Stevenson Dam	5.60	Bulls Bridge Dam	3.46	
Delaware	Milford 2 WSW	73	27	2 Stations	12	14	Milford 2 WSW	3.74	Lewes 1 SW	2.37	
Florida	3 Stations	89	30+	Smith Creek	37	13	Pompano Beach	11.27	3 Stations	.00	
Georgia	Waycross 4 NE	86	18	Blairsville Exp. Station	20	13	Ellijay	11.58	Savannah Beach	.46	
Hawaii	Pahala 21, Hawaii	89	9	Mauna Loa Slope Obs., Hawaii	26	26	Mount Waialeale 1047, Kaula	38.25	Mauna Kea Obs. 111.2, Hawaii	.17	
Idaho	Brownlee Dam	64	16	Hill City	- 37	2	Wallace Woodland Park	14.56	Leadore 2	T	
Illinois	Rosiclare	70	18	Mount Carroll	- 28	12	Charleston	5.48	Macon	1.79	
Indiana	Spurgeon 2 N	70	19	Wheatfield 2 NW	- 16	12	English	6.18	Rensselaer	2.15	
Iowa	2 Stations	62	30	Atlantic 1 NE	- 37	12	Tipton	4.19	Peterson 1 W	.06	
Kansas	Hugoton	71	21	Kirwin	- 30	4	Fort Scott	2.74	Geneseo	T	
Kentucky	2 Stations	74	19+	4 Stations	7	1	Mount Vernon	12.21	Covington WSO AP	3.65	
Louisiana	Saint Bernard	84	28+	Homer Exp. Station	- 19	1	Columbia Locks	17.48	Boothville WSO	1.22	
Maine	Saco	63	27	Clayton Lake 2	- 42	17	Bridgton 3 NW	4.59	Presque Isle	1.60	
Maryland	La Plata 1 W	75	27	Bittinger 2 NW	2	13	Oakland 1 SE	5.83	Benson Police Barracks	2.29	
Massachusetts	Chester 2	67	27	Chester 2	- 21	18	New Bedford	5.59	Edgartown	2.78	
Michigan	4 Stations	56	31+	Kenton U. S. Forest	- 36	2	Benton Harbor Airport	5.34	Stambaugh 1 S	.53	
Minnesota	New Ulm 2 SE	54	16	Thorhult 1 S	- 45	11	Wannaska 8 SE	1.55	3 Stations	.00	
Mississippi	8 Stations	80	23+	Hernando	14	1	2 Stations	18.15	2 Stations	4.10	
Missouri	Berryman 6 NW	72	18	Maryville 2 E	- 32	13+	Caruthersville	6.16	Kansas City Int. WSO AP	1.05	
Montana	Belfry 4 SSW	72	16	Opheim 10 N	- 48	11	Troy 18 N	10.39	Terry	.00	
Nebraska	Valentine WSO AP	70	16	Nead Agronomy Lab.	- 35	12	Mullen 21 NW	1.61	Lamar	T	
Nevada	Dixie Valley Stark	71	15	Currie Highway Station	- 29	2	Mount Rose Bowl	6.80	Mina	.11	
New Hampshire	Windham 3 NW	63	27	First Conn Lake	- 39	18	Mount Washington	8.26	Morroe 5 NNE	2.24	
New Jersey	Tuckerton	74	27	2 Stations	- 8	14-	Burlington	5.26	Cranford	2.37	
New Mexico	Jal	85	17	Eagle Nest	- 35	4	Sandia Crest	4.10	Orogrande	T	
New York	2 Stations	68	27	Chazy	- 37	18	Slide Mountain	5.85	Prattsburg 2 NW	.92	
North Carolina	Sloan 3 S	81	27	Grandfather Mountain	10	13	Mount Airy	14.35	Cape Hatteras WSO	2.02	
North Dakota	2 Stations	61	16	Bismarck WSO AP	- 42	12	Rolla 3 NW	1.06	Linton	.00	
Ohio	Ironton	72	18	Paulling	- 13	13	Waterloo	6.94	Middlebourne	1.80	
Oklahoma	Hollis	81	21	Kenton	- 18	4	Carnasaw Tower	5.98	Meeker 1 E	.00	
Oregon	2 Stations	68	15	2 Stations	- 27	6-	Valsetz	29.94	OO Ranch	.12	
Pennsylvania	2 Stations	71	28+	Lawrenceville	- 15	13	Confluence 1 SW Dam	5.95	Conneautville	1.86	
Puerto Rico & VI	Utua 1 WSW, P. R.	92	3+	Adjuntas Substation, P. R.	- 47	7	Pico Del Este, P. R.	12.64	Ensenada, P. R.	.05	
Rhode Island	Providence WSO AP	66	27	Kingston	- 8	14	North Scituate 4 W	4.94	Woonsocket	3.74	
South Carolina	2 Stations	84	24	Caesars Head 1 NE	20	13	Hogback Mountain	10.77	Hilton Head	.53	
South Dakota	Wood	76	16	Flandreau	- 40	1	Deerfield 4 NW	.98	46 Stations	T	
Tennessee	Greeneville Exp. Station	75	23	Dresden	9	1	Tullahoma	14.12	Sasburg Wildlife Refuge	5.04	
Texas	2 Stations	92	23+	Lipscomb	- 18	5-	Kirbyville Forest Service	14.16	17 Stations	.00	
Utah	Fish Springs Refuge	69	16	Woodruff	- 39	2	Pine View Dam	4.32	Wendover WSO AP	.12	
Vermont	Vernon	62	28	Endsberg Falls	- 35	18	Mount Mansfield	4.53	Huntington Center	1.55	
Virginia	Boykins	77	11	Monterey	4	13	Pennington Gap	8.73	Manassas	2.26	
Washington	3 Stations	67	16+	2 Stations	- 25	9-	Baring	33.03	Drosser 4 NE	.86	
West Virginia	Winfield Locks	77	23	2 Stations	3	13	Isager	8.94	Mathias	1.86	
Wisconsin	2 Stations	53	16	Prentice 1 N	- 41	1	Lake Geneva	4.01	River Falls	.06	
Wyoming	Sheridan WSO AP	70	15	Bondurant 3 NW	- 51	2	Snake River	5.67	2 Stations	T	

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METRIC UNITS

JANUARY 1974

State and Station	Elevation (ground)	Pressure		Temperature										Precipitation						Wind			No. of days (sunrise to sunset)		Possible sunshine									
		Station ϕ	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	No. of days		Snow, Ice pellets		Resultant speed	Fastest mile (1.6 kilometers)		Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)					
												Min. 32.2 °C or above	Min. 0 °C or lower						Total	Maximum depth on ground	Resultant direction	Speed		Direction						Date				
ALABAMA																																		
BIRMINGHAM	189	998.0	1020.9	16.0	7.1	11.6	4.8	22.8	10	- 2.8	13	0	3	9.4	89	174	51	37	16	5	0	0	0	0	0.7	19	15.6	W	28	5	4	22	7.7	32
HUNTSVILLE	190	997.6	1021.0	13.6	5.4	9.5	4.6	21.1	22	- 3.9	13	0	7	7.2	88	267	136	51	16	4	0	0	0	0.3	14	14.3	W	28	4	6	21	7.8		
MOBILE	64	1012.2	1020.3	22.1	13.4	17.8	7.1	26.1	23+	5.6	1	0	0	13.9	81	99	- 21	32	13	4	0	0	0	1.4	14	13.0	W	20	2	2	27	8.7		
MONTGOMERY	56	1013.5	1021.1	19.4	9.7	14.6	5.9	25.6	10	- 1.1	13	0	1	11.1	84	143	41	56	15	9	0	0	0	0.3	15	10.3	W	28	4	5	22	7.9	37	
ALASKA																																		
ANCHORAGE	35	1009.1	1014.2	-10.0	-18.0	-14.0	- 2.8	- 4.4	10	-27.8	20	0	8	-17.2	74	1	- 21	1	1	0	13	178	1.7	1	17.4	W	4	12	10	5	16	6.0	52	
ANNETTE	34	1006.8	1010.8	- 0.6	- 5.0	- 2.2	3.0	7.2	22	-13.3	15	0	26	- 6.1	77	163	-102.4	32	17	0	922	533	1.0	7	13.4	W	10	18+	4	7	20	7.5		
NARROW	9			-20.6	-26.9	-23.7	2.2	2.2	4	-33.9	12	0	0	13	27.2	73	2	- 12	4	1	5	0	0	6.6	27	15.6	W	28	5	5	21	6.5		
BARTER ISLAND	12	1023.7	1025.6	-20.3	-27.3	-23.8	2.4	3.9	4	-30.3	23	0	0	-27.2	73	2	- 12	4	1	3	102	8.1	3	7	16.2	W	27	6	6	12	6.1			
BETHEL	38	1011.2	1017.1	-11.6	-17.2	-14.3	0.6	3.6	3	-31.7	28	0	29	-20.0	62	6	- 8	4	3	0	8	31	3.7	3	14.3	W	16	5	15	6	10	4.3		
BETTLES	196			-11.2	- 2.8	- 6.9	2.5	1.1	5	-47.8	27	0	0	-47.8	28	9	9	7	5	0	97	508	3.5	9	17	15	6	15	6	10	4.3			
BIG DELTA	386			-21.2	-29.6	-25.4	4.9	7.2	4	-43.9	28	0	31	-43.9	28	3	- 6	3	3	0	56	56	3.5	11	25.0	W	2	2	4	25	8.5			
COLD BAY	29	1005.4	1009.3	1.0	- 3.6	- 1.3	0.8	8.9	11	-13.9	20+	0	18	- 2.8	88	75	- 14	26	17	0	165	102	3.5	11	25.0	W	11	2	2	4	25	8.5		
FAIRBANKS	133	1004.4	1023.1	-22.4	-31.7	-27.1	2.7	- 4.1	6+	-42.2	28	0	31	-31.7	69	4	- 12	3	4	0	76	330	0.9	2	6.3	W	19	24	11	8	12	5.4		
GULKANA	479			-22.6	-31.6	-27.1	1.4	-14.4	11	-41.7	21	0	31	-41.7	21	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	
HOMER	19	1005.5	1011.9	- 6.1	-13.8	- 9.9	4.1	0.0	2	-22.2	29+	0	31	-12.8	78	19	- 24	7	7	0	226	178	1.9	2	10.9	W	21	19+	10	8	13	5.7		
JUNEAU	4	1012.5	1013.2	- 5.8	-13.3	- 9.6	4.8	2.2	25	-23.9	30	0	31	-13.9	75	60	- 40	16	13	0	914	483	2.0	5	12.5	W	10	15	9	6	16	6.5	49	
KING SALMON	13	1011.9	1013.8	- 8.1	-16.9	-12.5	2.2	6.1	3	-32.8	29	0	31	-17.2	67	22	- 2	12	6	0	302	275	2.5	2	16.5	W	9	21	10	5	16	6.1		
KODIAK	4	1006.8	1011.1	0.1	- 5.5	- 2.7	1.8	5.0	24	-15.6	20+	0	25	- 8.3	66	73	- 55	20	16	0	472	203	3.5	31	17.9	W	31	16	9	4	18	6.5		
KOTZEBUE	3	1023.4	1024.0	-16.7	-22.9	-19.8	0.0	2.2	4+	-34.3	31+	0	31	-25.6	63	5	- 3	4	3	0	28	508	1.6	6	15.6	W	31	15	14	2	11	4.0		
MC GRATH	103	1006.8	1020.8	-18.9	-29.2	-24.1	1.3	- 2.2	5	-44.4	30	0	31	-27.8	72	9	- 12	5	3	0	147	635	0.4	34	8.0	W	36	16+	12	6	13	4.3		
NOME	4	1020.3	1021.0	-11.4	-18.5	-14.9	0.5	1.7	4+	-31.1	28	0	31	-20.0	67	21	- 2	12	7	0	91	279	2.9	6	16.1	W	5	22	15	6	10	4.4	62	
ST. PAUL ISLAND	7	1010.2	1011.1	- 1.4	- 4.8	- 3.1	0.2	5.0	2+	-15.0	28	0	20	- 5.0	86	54	- 7	10	25	0	196	78	6.5	6	26.8	W	4	21	0	3	28	9.3		
SUMMIT	732	925.8	1022.0	-17.2	-23.4	-20.3	3.4	- 7.2	3	-30.6	18	0	31	-25.0	67	3	- 20	3	3	0	36	330	6.5	4	16.5	W	6	16	15	8	8	4.3		
TALKEETNA	105			-11.2	-23.1	-17.1	4.6	- 1.1	9+	-35.6	21	0	31	-17.1	7	T	- 41	T	0	0	T	635	6.5	4	16.5	W	3	17	16	5	10	4.2		
UNALAKLEET	5			-14.0	-15.4	-17.1	1.2									15	2	8	4	0	150	178	2.1	8	13.0	W	5	13	6	5	20	7.3		
YAKUTAT	9	1009.1	1010.2	- 4.4	-12.7	- 8.6	4.2	1.7	25	-23.9	30	0	31	-11.7	77	94	-169	24	12	0	846	838	2.1	8	13.0	W	5	13	6	5	20	7.3		
ARIZONA																																		
FLAGSTAFF	2135	785.6	1018.6	4.1	- 8.6	- 2.3	0.1	15.6	16	-17.8	2	0	31	- 6.1	77	92	- 44	30	13	0	897	686	1.0	22	17.0	SW	5	7	11	13	6.1	51		
PHOENIX	340	977.7	1017.2	19.1	5.4	12.2	1.6	25.6	16+	- 1.1	3	0	1	1.1	52	14	- 4	9	4	0	0	0	0.6	15	22.8Y	SW	5	14	8	9	4.6	79		
TUCSON	788	926.9	1016.1	17.1	3.2	10.1	0.5	26.1	16	- 2.2	23	0	6	- 0.6	53	24	- 4	13	6	0	10	0	1.1	19	16.5	SW	1	15	6	10	4.5	75		
WINSLOW	1492	852.4	1021.2	6.1	- 5.8	0.2	0.2	14.4	31+	-12.8	2	0	31	- 5.0	75	21	11	8	7	0	69	51	0.8	24	11.6	W	21	26	8	15	6.4			
YUMA	59	1010.2	1017.7	19.0	6.8	12.9	0.1	25.0	17	- 0.6	3	0	1	2.2	52	16	7	10	3	0	0	0	2.1	36	15.2	W	1	15	8	8	4.4	82		
ARKANSAS																																		
FORT SMITH	136	1003.1	1020.1	9.1	- 2.1	3.5	0.4	22.2	18	-12.2	1	0	22	- 1.7	74	24	- 36	12	7	0	T	51	0.8	2	10.7	SW	26	5	8	18	7.5	37		
LITTLE ROCK	78	1010.8	1020.5	10.1	1.4	5.8	1.6	22.2	31	- 9.4	1	0	12	3.3	85	147	- 39	59	15	3	8	7	0.7	4	12.1	SW	26	5	4	22	7.6	33		
CALIFORNIA																																		
BAKERSFIELD	143	1001.0	1019.0	15.8	5.9	10.9	2.3	26.1	15	- 0.6	2	0	1	6.1	77	29	5	13	8	0	0	0	0.8	7	14.3	W	11	3	8	7	16	6.7		
BISHOP	1282	875.0		5.8	- 8.4	- 1.3	4.1	16.7	28+	-21.7	10	0	31			38	7	19	8	0	351	254	2.1	12	5	14	5	14	6.3					
BLUE CANYON	1609	837.5		4.5	- 1.8	1.4	1.1	12.8	24	-10.6	2	0	20			346	- 1	85	17	0	912	1143	2.1	17	13.4	W	17	31	10	5	16	6.3		
EUREKA	13			11.3	5.0	8.2	0.3	18.3	13	- 0.6	10+	0	4			153	- 36	75	16	T	T	T	T	19.2	SW	5	18+	8	6	17	6.6	54		
FRESNO	100	1007.1	1019.0	13.3	4.3	8.8	1.4	23.9	15	- 1.7	2	0	2	5.6	84	72	25	25	11	1	0	0	0.8	8	12.1	NW	1	5	3	25	7.9	44		
LONG BEACH	8	1017.3	1018.6	16.8	6.9	11.9	0.4	25.6	14	2.2	2	0	0	6.7	75	155	98	64	12	1	0	0	0.4	20	11.6	W	26	1	9	7	15	6.4		
LOS ANGELES	30	1014.2	1018.0	16.2	8.6	12.4	0.1	26.1	14	3.9	2	0	0	7.2	76	144	80	49	11	1	T	0	0.3	16	17.9Y	W	1	7	9	15	6.5			
LOS ANGELES U	82			17.2	8.6	12.9	0.8	27.2	14	3.3	2	0	0			212	1																	

CLIMATOLOGICAL DATA

METRIC UNITS

JANUARY 1974

State and Station	Pressure			Temperature										Precipitation					Wind				No. of days (sunrise to sunset)														
	Elevation (ground)	Station ϕ	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	No. of days		Snow, ice pellets		Resultant speed	Resultant direction	Fastest mile (1.6 kilometers)		Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)	Possible sunshine					
												Max. 37.2 °C or above	Min. 0 °C or lower						.25 mm. or more	With thunderstorms	Total	Maximum depth on ground			Speed	Direction											
INDIANA	M.	Mb.	Mb.	°C	°C	°C	°C	°C	°C	°C	°C			°C	%	Mm.	Mm.	Mm.					M.p.s.	M.p.s.													
FORT WAYNE	241	989.2	1020.5	0.9	- 7.7	- 3.4	0.3	13.9	26	-23.3	12	0	27	80	83	19	24	11	0	0	216	254	2.0	24	21.0												
INDIANAPOLIS	261	990.5	1020.5	4.4	- 4.9	- 0.2	2.1	16.1	18	-20.0	12	0	23	82	86	13	24	11	0	97	229	1.1	25	19.7													
SOUTH BEND	236	990.2	1019.2	1.7	- 6.3	- 2.3	2.2	13.3	26	-18.9	12	0	25	82	82	22	30	18	0	366	279	2.3	22	16.1													
IOWA																																					
BURLINGTON	211			- 1.1	- 9.0	- 5.0	0.1	13.3	30	-28.9	12	0	28	73	81	41	31	13	0	183	178	1.1	27	10.3													
DÉS MOINES	286	984.1	1020.6	- 2.9	-10.9	- 6.9	0.1	13.3	30	-30.6	12	0	28	72	38	9	18	10	0	269	203	1.1	26	16.5													
DUBUQUE	322			- 4.5	-11.5	- 8.0	0.1	7.2	30	-30.0	12	0	31	81	61	17	22	12	0	231	178																
SIOUX CITY	334	978.7	1020.5	- 3.0	-13.9	- 8.4	0.7	12.8	30	-31.1	12	0	31	81	7	- 10	2	8	0	107	152	0.5	20	14.3													
WATERLOO	267	986.8	1020.6	- 4.5	-12.0	- 8.2	0.5	8.3	30	-32.2	12	0	30	67	25	- 1	12	8	0	109	102	1.3	26	14.3													
KANSAS																																					
CONCORDIA	448	965.1	1020.5	- 0.9	-10.2	- 5.6	2.4	16.7	30	-27.2	12	0	27	79	8	- 8	3	7	0	196	305	1.0	26	12.5													
DODGE CITY	787	929.2	1019.4	2.6	- 9.1	- 3.2	2.6	18.9	30	-23.3	5	4	30	66	8	- 5	3	6	0	107	127	1.0	29	14.3													
GOODLAND	1114	886.6	1018.5	1.2	-10.6	- 4.7	2.3	16.7	30	-26.1	4	0	28	73	4	- 5	2	6	0	81	152	2.3	26	11.6													
TOPEKA	267	988.2	1021.4	- 0.2	-10.7	- 5.4	3.2	17.8	30	-28.9	12	4	30	77	25	- 1	8	10	0	198	254	0.7	32	10.3													
WICHITA	403	970.9	1020.7	0.9	- 8.8	- 3.9	3.6	14.4	30	-22.8	4	0	29	80	14	- 7	8	9	0	104	152	0.8	1	12.1													
KENTUCKY																																					
COVINGTON	265	987.8	1020.5	6.3	- 2.2	2.1	2.6	16.7	22	-13.3	2	0	20	84	93	8	17	12	0	43	25	1.3	24	12.5													
LEXINGTON	294	984.4	1020.9	8.9	0.8	4.3	4.3	18.9	26	- 9.4	2	4	13	81	162	62	72	14	0	7	1	1.6	20	12.1													
LOUISVILLE	145	1002.4	1020.5	7.7	0.9	4.3	3.6	18.9	22	- 9.4	2	0	15	74	111	22	35	12	0	25	25	1.1	25	21.0													
LOUISIANA																																					
ALEXANDRIA	28	1015.2	1019.5	16.9	7.6	12.3	3.6	26.7	18	- 1.7	1	0	5	80	303	184	73	17	8	0	0	0.5	7	9.8													
BATON ROUGE	20	1016.9	1019.6	20.6	11.4	16.0	5.4	26.7	18	1.7	4	0	0	80	212	100	59	13	4	0	0	0.9	11	8.0													
LAKE CHARLES	3	1018.0	1018.9	18.5	10.3	14.4	3.2	25.6	18	1.1	4	0	0	88	322	220	91	15	10	0	0	1.4	9	15.6													
NEW ORLEANS	1	1018.6	1019.5	21.6	13.2	17.4	5.8	27.2	10	5.0	4	0	0	83	215	100	60	14	5	0	0	1.2	12	13.0													
SHREVEPORT	77	1009.8	1019.4	13.2	4.3	8.8	0.3	26.1	31	- 5.0	1	0	8	88	256	154	57	16	6	0	1	0.5	4	8.9													
MAINE																																					
CARIBOU	190	992.2		- 8.3	-19.9	-14.1	2.2	6.1	27	-35.6	14	0	31	77	48	- 4	9	18	0	526	381																
PORTLAND	13	1016.6	1019.1	- 0.3	- 9.5	- 4.9	0.9	13.9	27	-26.7	18	0	29	77	87	1	27	17	0	381	305	1.7	29	19.2													
MARYLAND																																					
BALTIMORE	45	1015.6	1021.5	7.6	- 1.0	3.3	2.5	22.2	27	-10.0	14	0	18	71	74	0	16	12	0	30	25	1.2	30	13.4													
MASSACHUSETTS																																					
BLUE HILL OBS R	192			2.1	- 6.1	- 1.9	1.3	17.2	27	-21.7	18	0	25	105	105	- 1	23	12	0	442	305																
BOSTON	5	1019.0	1019.9	3.8	- 4.1	- 0.2	1.4	17.2	27	-19.4	18	0	20	82	82	- 12	17	12	0	406	254	3.1	28	27.3													
WORCESTER	301	980.7		1.1	- 7.3	- 3.1	1.6	15.6	27	-21.1	18	0	28	66	90	5	19	13	0	318	254	2.6	28	15.6													
MICHIGAN																																					
ALPENA	210	991.2	1017.6	- 1.9	-10.6	- 6.2	1.7	8.3	30	-25.0	8	0	31	73	77	35	30	13	0	353	203	1.4	25	14.3													
DETROIT	189			1.7	- 4.8	- 1.6	2.1	13.3	27	-15.6	8	0	24	65	83	34	23	17	1	358	178	2.3	25	17.9													
DETROIT METRO	193	994.2	1019.3	1.0	- 7.1	- 3.1	1.1	13.3	27	-22.2	12	0	25	85	83	34	23	17	1	358	178	2.3	24	22.4													
FLINT	235	989.2	1018.3	- 0.2	- 7.9	- 4.0	1.4	10.6	27	-23.3	12	0	25	82	66	23	28	17	0	236	178	2.5	23	14.3													
GRAND RAPIDS	239	988.5	1018.8	- 0.1	- 6.9	- 3.5	1.4	10.6	26	-18.9	13	0	29	79	82	33	34	15	0	338	229	2.0	22	16.5													
HOUGHTON LAKE	350	973.9	1017.8	- 2.5	-10.6	- 6.5	1.6	7.8	30	-25.6	8	0	31	82	80	42	35	15	0	284	203	2.1	25	11.6													
LANSING	256	985.8	1018.8	0.2	- 8.1	- 3.9	1.3	11.7	26	-24.4	12	0	28	76	76	28	31	15	0	378	279	2.6	24	20.1													
MARQUETTE U	206			- 4.8	-11.8	- 8.3	0.7	5.0	26	-27.9	2	0	31	81	33	- 6	9	15	0	394	483																

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State and Station	Elevation (ground)	Pressure			Temperature								Precipitation					Wind			No. of days (sunrise to sunset)			Possible sunshine										
		Station Ø	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days	Max. 32.2 °C or above	Min. 0 °C or below	Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	No. of days		Snow			Resultant speed	Fastest mile (1.6 kilometers)								
																				With thunderstorms	Total	Maximum depth on ground	Resultant direction			Speed	Direction	Date	Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)		
																																	Ice pellets	Resultant direction
NORTH CAROLINA																																		
ASHEVILLE	652	943.6	1021.0	14.9	3.1	9.0	5.7	22.8	16	-4.4	13	0	8	6.1	86	87	1	30	16	0	0	0	0	0.1	27	11.6	33	1	6	5	20	7.5	43	
CAPE HATTERAS R	2	1021.3	1021.7	16.7	9.4	13.1	5.7	22.8	1	1.7	13	0	0	11.1	87	51	-57	16	15	2	0	0	0	1.2	32	10.3	23	28	4	6	21	7.7	35	
CHARLOTTE	224	993.6	1021.3	14.6	5.2	9.9	4.3	23.3	16	-4.4	14	0	0	6.1	86	193	43	36	14	2	0	0	0	0.9	21	11.6	SW	11	2	4	25	8.4	29	
GREENSBORO	273	989.2	1021.5	12.5	2.8	7.7	3.9	22.2	27	-7.2	13	0	7	4.4	82	116	35	41	14	0	0	0	0.8	22	11.6	S	11	3	4	24	8.2	33		
RALEIGH	132	1005.1	1021.2	14.6	4.6	9.6	4.9	24.4	23	-5.6	13	0	4	6.1	83	112	30	40	12	1	0	0	0.7	23	11.2	SW	28	3	6	22	8.1	34		
WILMINGTON	9	1020.3	1021.6	20.2	9.3	14.9	6.9	26.7	24	-1.7	14	0	2	12.2	87	71	-9	45	15	2	0	0	0.6	25	11.2	SW	28	4	5	22	7.7	55		
NORTH DAKOTA																																		
BISMARCK	502	954.3	1017.9	-7.3	-23.0	-14.2	-0.9	7.8	16	-41.1	12	0	31	-17.2	78	3	-10	1	5	0	0	36	152	1.1	31	16.1	NW	30	5	7	19	7.3	47	
FARGO	273	983.7	1019.0	-11.8	-22.9	-16.8	2.3	0.0	26	-33.3	11	0	31	-20.0	78	9	-4	3	10	0	155	152	1.0	26	15.6	SE	19	6	11	14	6.4	42		
WILLISTON	579	944.8	1017.2	-7.6	-20.4	-14.0	-0.8	8.9	16	-37.8	11	0	30	-17.2	78	12	-3	6	11	0	86	127	1.4	28	12.3	NW	17	3	8	20	7.5	31		
OHIO																																		
AKRON	368	973.9	1020.1	3.9	-5.4	-0.7	2.4	16.7	20	-18.3	8	0	24	-5.0	75	74	-6	32	17	0	211	178	1.6	23	13.0	W	21	26	2	5	24	8.6	24	
CINCINNATI ABBE OB	232			6.3	-1.0	2.7	2.6	17.2	18	-11.1	2	0	15			80	-7	15	11	0														
CLEVELAND	237	989.8	1020.0	4.7	-4.7	0.0	2.8	17.8	20	-17.8	13	0	21	-3.9	76	65	0	14	17	0	226	203	2.5	22	19.2	SW	27	1	5	25	8.6	31		
COLUMBUS	247	989.8	1020.7	5.3	-4.0	0.7	2.7	16.7	20	-15.6	13	0	24	-2.8	79	61	-12	15	13	0	58	76	1.3	23	17.4	S	26	2	5	24	8.5	15		
DAYTON	305	983.1	1020.5	4.8	-4.3	0.2	2.4	16.7	20	-17.8	2	0	20	-3.9	80	68	-2	16	14	0	51	203	1.7	22	13.9	S	26	5	1	25	8.2	32		
MANSFIELD	395			4.6	-4.8	0.0	2.2	16.7	20	-18.9	13	0	19			91	31	34	15	0	206	279	2.7	23	15.6	SW	27	3	5	23	8.4			
TOLEDO	204	993.9	1020.0	1.2	-7.8	-3.3	0.7	13.9	26	-21.1	8	0	28	-6.7	77	58	5	17	15	0	191	178	1.8	24	17.4	SW	27	5	4	22	7.8	32		
YOUNGSTOWN	359	975.6	1019.9	2.8	-5.1	-1.1	2.4	15.0	20	-16.7	13	0	23	-5.0	76	71	-4	29	15	0	249	254	1.8	24	17.9	SW	27	2	3	26	8.9			
OKLAHOMA																																		
OKLAHOMA CITY	392	971.4	1019.7	8.0	-4.7	1.7	1.0	20.6	30	-15.0	12	0	23	-4.4	71	3	-26	1	4	0	18	T	0.8	2	13.9	NW	8	13	7	11	5.2	55		
TULSA	198	995.3	1020.6	6.6	-4.3	1.2	1.4	20.0	30	-15.0	12	0	21	-3.3	77	20	-16	13	6	0	T	T	0.3	3	12.3	SW	26	7	12	12	6.0	45		
OREGON																																		
ASTORIA	2	1016.3	1017.1	7.0	0.7	3.8	0.9	13.9	14	-9.4	9	0	14	0.6	80	317	-70	52	22	0	10	T	2.4	18	17.9	W	14	6	3	22	7.5			
BURNS U	1265			1.8	-7.8	-3.0	0.8	10.6	15	-21.1	9	0	28			22	-23	8	8	0	114	102												
EUGENE	109	1004.7	1018.5	8.3	-7.3	4.1	0.1	17.2	18	-12.2	10	0	14	-1.1	71	325	134	124	18	0	T	T	1.3	19	12.1	SW	36	5	7	4	20	7.5		
MEACHAM	1234	874.4	1018.7	1.9	-7.6	-4.8	1.6	11.1	15	-23.3	5	0	26			100	-10	25	15	0	84													
MEDFORD	396	970.5	1019.2	8.1	-0.7	3.7	1.2	16.1	13	-8.9	10	0	18	-2.2	70	110	-20	41	13	0	T	T	0.2	18	13.0	W	16	18	7	4	20	7.6		
PENDLETON	452	963.8	1019.3	2.7	4.3	-0.9	0.9	20.0	15	-23.3	9	0	14	-7.2	63	20	-21	6	13	0	66	51	2.8	24	13.4	W	31	2	7	22	8.1			
PORTLAND	6	1017.3	1018.4	6.5	-0.1	3.3	0.1	16.7	18	-11.1	9	0	14	-1.7	73	216	67	66	17	0	T	T	3.0	16	17.9	E	2	7	2	22	7.5	32		
SALEM	60	1010.8	1018.2	7.1	-0.9	3.1	0.7	19.0	18	-14.4	9	0	14	-2.2	71	277	101	72	16	0	T	T	2.1	19	13.0	W	19	31	7	4	20	7.1		
SEXTON SUMMIT R	1169	882.2	1018.1	2.1	-3.6	-0.7	2.1	11.1	24	-11.7	6	0	26	-4.6	75	440	204	152	14	0	178	76	4.0	18	19.2	W	19	15	8	4	19	7.0		
PACIFIC AREA																																		
GUAM TAGUAC R	110			28.8	21.6	25.2	0.1	30.6	13	17.2	25	0	0			108	-23	54	16	0	0	0			9.4	NE	27						46	
JOHNSTON	3	1010.8	1011.3	27.5	23.4	25.4	0.6	28.9	5	21.1	1	0	0	20.0	72	8	-57	3	6	0	0	0	2.0	12	12.5	E	23	25	5	1	2.7	89		
KOROR R	29			30.5	23.9	27.2	0.1	32.8	1	21.1	16	2	0			715	440	352	26	4	0	0			13.2	SW	9	0	5	26	9.3	42		
KWAJALEIN	2	1007.8	1008.4	30.0	25.1	27.6	0.2	30.6	31	23.3	22	0	0	23.3	78	222	127	57	18	0	0	0	3.4	7	10.3	W	9	6	13	13	6.6	40		
MAJURO	3			28.9	24.3	26.6	0.5	30.0	31	23.3	23	0	0			282	54	56	25	0	0	0			10.7	E	31	0	10	21	8.2	62		
PAGO PAGO	4	1006.5	1008.7	30.3	23.7	27.0	0.2	31.7	26	21.7	24	0	0	23.3	82	235	-76	62	28	1	0	0	2.5	6	14.8	NE	30	0	13	18	8.0	65		
PONAPE R	37			31.2	21.9	26.6	0.4	32.8	14	18.9	12	3	0			271	-28	43	18	0	0	0			8.0	NE	2	3	13	15	6.9	52		
TRUK MOEN ISLAND	2			30.7	23.9	27.3	0.1	31.7	21	21.7	18	0	0			260	42	53	15	3	0	0			12.1	NE	27	2	5	24	8.2	69		
WAKE	3	1009.8	1010.3	27.8	21.8	24.8	-0.2	29.4	12	18.9	10	0	0	19.4	75	108	81	59	10	0	0	0	0.6	25	17.9	NE	9	13	9	9	5.1	21		
YAP R	13			29.6	23.0	26.3	-0.6	30.6	30	21.1	25	0	0			301	86	90	23	1	0	0			9.8	NE	16	0	8	23	8.3	41		
PENNSYLVANIA																																		
ALLENTOWN	118	1006.8	1021.3	3.7	-4.6	-0.4	1.9	18.9	27	-17.2	14	0	26	-3.9	76	93	-16	21	13	0	183	127	1.3	29	15.6	W	29	31	4	9	18	7.4		
ERIE	223	992.6	1020.1	2.6	-4.8	-1.1	2.7	13.9	27	-13.3	5	0	25	-5.0	78	62	-1	12	20	0	538	330	2.9	21	14.8	W	22	27	1	3	27	9.0		
HARRISBURG	103	1007.8	1021.1	5.4	-2.4	1.6	2.6	20.6	27	-9.4	14	0	23	-3.9	69	97	32	35	12	0	178	152	0.7	32	13.4	NW	31							

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State and Station	Pressure			Temperature										Precipitation						Wind				No. of days (sunrise to sunset)			Possible sunshine						
	Elevation (ground)	Station ϕ	Sea level	Average maximum	Average minimum	Average	Departure from normal	Highest	Date	Lowest	Date	No. of days		Average dew point	Average relative humidity	Total	Departure from normal	Greatest in 24 hours	No. of days		Snow, ice pellets		Resultant speed	Resultant direction		Fastest mile (1.6 kilometers)							
												Max. 32.2 °C or above	Min. 0 °C or lower						.25 mm. or more	With thunderstorms	Total	Maximum depth on ground		Speed	Direction	Date		Clear, 0-3	Partly cloudy, 4-7	Cloudy, 8-10	Sky cover, tenths (sunrise to sunset)		
																																°C	°C
WASHINGTON	M.	Mb.	Mb.	°C	°C	°C	°C	°C	°C	°C	°C			°C	%	Mm.	Mm.	Mm.			Mm.	Mm.	M.p.s.	M.p.s.								%	
WALLA WALLA U	289			3.0	-3.1	0.0	0.8	19.4	15	-20.0	9+	0	14		43	-10	13	16			71	203	1.5	27	14.3	S	18	3	3	25	8.4	22	
YAKIMA	321	978.7	1018.6	3.2	-8.3	-2.6	0.1	15.0	29	-26.1	9	0	21	-8.9	65	42	9	18	6	0	155	229			17.4	S	28	8	5	18	6.7		
WEST INDIES																																	
SAN JUAN P.R.	4	1016.3	1018.7	27.8	22.5	25.2	1.1	28.3	24	20.0	16	0	0	18.3	66	74	-21	13	25	0	0	0	5.4	10	15.2	SF	26	2	27	2	5.4	61	
WEST VIRGINIA																																	
BECKLEY	763	930.2	1020.4	9.6	0.8	5.2	5.6	17.2	22	-12.8	13	0	11	2.2	84	162	74	58	22	1	36	25	2.0	23	17.9	23	28	2	4	25	8.4		
CHARLESTON	286	985.8	1020.6	11.1	1.7	6.4	5.0	22.8	20	-10.0	13	0	13	2.8	80	119	33	45	17	0	8	1	1.1	26	17.0	17	28	0	7	24	8.6		
ELKINS	594	947.9		9.2	-1.4	3.9	5.0	16.7	27	-14.4	13	0	17			103	19	31	17		70	1					3	4	24	8.3			
HUNTINGTON	252	989.5	1020.3	9.4	1.6	5.5	4.2	21.7	18	-8.3	2	0	14	2.2	84	141	61	67	17	1	8	1	1.1	27	11.6	27	28	0	5	26	8.9		
PARKERSBURG U	187			8.2	0.1	4.1	3.6	20.6	20	-10.0	13+	0	14			121	43	53	16		36	25			16.1	SW	28				21		
WISCONSIN																																	
GREEN BAY	208	992.6	1019.3	-4.7	-12.1	-8.4	0.8	4.4	30	-28.9	12	0	31	-12.2	73	43	-16	22	10	0	112	102	2.1	26	15.2	NW	31	8	3	20	7.0	45	
LA CROSSE	198	994.6	1020.6	-3.7	-11.9	-7.8	1.1	10.6	16	-31.1	12	0	31	-11.7	77	10	-14				51	0.9	21										
MADISON	262	986.5	1019.2	-3.2	-11.1	-7.1	1.3	10.0	16	-28.3	12	0	28	-10.6	75	62	30	32	12	0	267	152	1.6	25	15.6	NW	31	8	5	18	6.8	44	
MILWAUKEE	205	992.9	1019.3	-2.5	-9.1	-5.8	1.2	7.9	30	-23.9	12	0	27	-10.0	72	92	50	36	10	0	361	229	2.9	26	16.1	NW	31	7	5	19	7.1	46	
WYOMING																																	
CASPER	1627	833.4	1017.6	-1.9	-12.9	-7.4	2.5	12.8	16	-33.3	11	0	28	-11.7	69	18	5	9	8	0	356	152	7.2	22	22.8	21	30	5	9	17	6.8		
CHEYENNE	1867	807.0	1016.6	0.8	-9.6	-4.4	1.4	16.7	16	-28.3	3	0	24	-13.3	51	12	-1	7	6	0	127	178	4.2	27	22.4	NW	30	8	9	14	6.0	52	
LANDER	1696	824.9	1018.2	-0.8	-14.5	-7.7	0.8	15.6	15	-29.4	11	0	20	-14.4	62	11	-1	7	4	0	183	152	1.1	25	31.3	SW	30	8	12	11	6.0	62	
SHERIDAN	1208	874.7		-0.1	-13.6	-6.8	0.7	21.1	15	-32.8	1	0	27	-12.8	63	17	-1	8	9	0	254	178	2.3	28	23.2	SW	15	3	7	21	7.8	49	

HEATING DEGREE DAYS

(Base 65°F.)

JANUARY 1974

State and station	Current season			State and station	Current season			State and station	Current season			State and station	Current season		
	This month	Period July through this month	Normal July through this month		This month	Period July through this month	Normal July through this month		This month	Period July through this month	Normal July through this month		This month	Period July through this month	Normal July through this month
ALABAMA				IDAHO				NEBRASKA				TENNESSEE			
BIRMINGHAM	374	1350	1602	BOISE	1095	3110	3457	GRAND ISLAND	1479	4061	3781	BRISTOL	552	2008	2598
HUNTSVILLE	486	1517	2059	LEWISTON	1106	3144	3269	LINCOLN	1933	4019	3688	CHATTANOOGA	480	1722	2181
MOBILE	108	594	1086	POCATELLO	1313	4012	4083	NORFOLK	1493	4134	4092	KNOXVILLE	481	1733	2144
MONTGOMERY	218	976	1467					NORTH PLATTE	1518	4336	3933	MEMPHIS	599	1583	2023
				ILLINOIS				OMAHA	1427	3823	3589	NASHVILLE	601	1762	2279
ALASKA				CAIRO U	830	2165	2362	SCOTTSBLUFF	1407	4211	3893	OAK RIDGE R	548	1902	2407
ANCHORAGE	1797	6912	6523	CHICAGO O HARE	1240	3382	3729	VALENTINE	1413	4199	4196				
ANNETTE	1138	4648	1968	CHICAGO MIDWAY	1230	3376	3513								
BARROW	2352	10127	11078	MOLINE	1338	3681	3747	NEVADA				ABILENE	680	1530	1662
BARTER ISLAND	2358	10373	10922	PEORIA	1292	3507	3582	ELKO	1145	3835	4310	AMARILLO	922	2365	2508
BETHEL	1824	7320	7562	ROCKFORD	1354	3741	3967	ELY	1285	4397	4355	AUSTIN	496	974	1126
BETTLES				SPRINGFIELD	1200	3139	3288	LAS VEGAS	738	1705	1690	BROWNSVILLE	190	336	410
BIG DELTA	2444	8778	8434				RFNO	1027	3224	3456	CORPUS CHRISTI	264	488	611	
COLD BAY	1089	5942	5383	INDIANA				WINNEMUCCA	1070	3428	3810	DEL RIO	363	809	1061
FAIRBANKS	2535	8794	8891	EVANSVILLE	844	2433	2798				EL PASO	696	1661	1796	
HEER	1571	6339	5989	FORT WAYNE	1204	3342	3568	NEW HAMPSHIRE				FORT WORTH	696	1384	1903
JUNEAU	1550	5990	5244	INDIANAPOLIS	1028	2863	3276	CONCORD	1345	4103	4162	GALVESTON U	251	524	744
KING SALMON	1719	6459	6716	SOUTH BEND	1142	3148	3670	MT WASHINGTON OBS	1809	7370	7722	HOUSTON INTERCOM	330	776	928
KODIAK	1164	5987	4921							LUBBOCK	726	1899	2194		
KOTZEBUE	2129	8849	8803	IOWA				NEW JERSEY				MIDLAND	607	1516	1692
MC GRATH	2365	9046	8834	BURLINGTON	1298	3524	3618	ATLANTIC CITY	788	2389	2795	PORT ARTHUR	288	768	991
NOME	1857	8135	7961	DES MOINES	1406	3727	3927	ATLANTIC CITY U	798	2195	2502	SAN ANTONIO	554	1234	1466
ST. PAUL ISLAND	1188	5865	5915	DURBUOE	1460	4076	4235	NEWARK	909	2359	2829	SAN ANGELO	437	917	1035
TALKFETA	1978	7680	7014	SIoux CITY	1491	3889	4173	TRENTON U	906	2459	2805	VICTORIA	301	590	795
UNALAKLET				WATERLOO	1480	4150	4342				WACO	605	1205	1321	
YAKUTAT	1490	5905	5422				NEW MEXICO				WICHITA FALLS	752	1673	1835	
				KANSAS				ALBUQUERQUE	965	2824	2657				
ARIZONA				CONCORDIA	1329	3469	3329	CLAYTON	1025	2900	2994	UTAH			
FLAGSTAFF	1147	3717	4033	DODGE CITY	1199	3106	2994	ROSWELL	755	2032	2346	MILFORD	1362	3928	3747
PHOENIX	333	782	1015	GOODLAND	1281	3700	3551				SALT LAKE CITY	1181	3362	3512	
TUCSON	451	1030	1095	TOPEKA	1317	3251	3153				WENDOVER	1149	3452	3522	
WINSLON	1009	2905	2896	WICHITA	1237	3016	2840								
YUMA	293	645	692				NEW YORK								
				KENTUCKY				ALBANY	1285	3807	3911	VERMONT			
ARKANSAS				COVINGTON	901	2693	2972	BINGHAMTON	1160	3524	4054	BURLINGTON	1431	4179	4410
FORT SMITH	821	2007	2108	LEXINGTON	744	2308	2808	BUFFALO	913	3507	3788				
LITTLE ROCK	690	1694	2105	LOUISVILLE	772	2239	2770	NEW YORK U	913	2397	2698				
							NEW YORK KENNFYD	920	2642	2819	VIRGINIA				
CALIFORNIA				LOUISIANA				NEW YORK LA GUARDIA	903	2370	2716	LYNCHBURG	641	2141	2530
BAKERSFIELD	409	1157	1404	ALEXANDRIA	357	1055	1412	ROCHESTER	1167	3343	3703	NORFOLK	504	1515	2016
BISHOP	1088	2771	2558	BATON ROUGE	179	667	1094	SYRACUSE	1200	3539	3688	RICHMOND	589	1915	2363
BLUE CANYON	939	3245	2839	LAKE CHARLES	245	719	966				ROANOKE	607	2102	2559	
EUREKA U	559	2595	2555	NEW ORLEANS	117	570	949	NORTH CAROLINA				WALLOPS ISLAND	676	2438	2365
FRESNO	522	1520	1641	SHREVEPORT	533	1294	1390	ASHEVILLE	516	1973	2535				
LONG BEACH	354	863	844				CAPE MATTERAS R	293	959	1500	WASHINGTON	852	3265	3140	
LOS ANGELES	323	714	902	MAINE				CHARLOTTE	463	1665	1990	OLYMPIA	828	3514	3276
LOS ANGELES U	300	639	639	CARIBOU	1810	5272	5397	GREENSBORO	586	2045	2336	QUILLAYUTE	790	2698	2510
MT. SHASTA R	1009	3407	3255	PORTLAND	1290	3793	4134	RALEIGH	481	1611	2146	SEATTLE	809	2757	2932
OAKLAND	516	1753	1615				WILMINGTON	211	933	1497	SEATTLE-TACOMA	1265	3979	4026	
RED BLUFF	577	1658	1612	MARYLAND							SPOKANE	1363	4487	5235	
SACRAMENTO	571	1585	1678	BALTIMORE	830	2451	2745	BISMARCK	1816	5677	5244	STAMPEDE PASS R	1016	2816	2946
SANDBERG R	896	2477	2248				FARGO	1963	5643	5374	WALLA WALLA U	1157	3536	3672	
SAN DIEGO	243	586	776	MASSACHUSETTS				WILLISTON	1801	5599	5332	YAKIMA			
SAN FRANCISCO	501	1720	1663	BLUE HILL OBS R	1129	3272	3475				WEST VIRGINIA				
SAN FRANCISCO U	423	1813	1681	BOSTON	1029	2760	3081	OHIO				BECKLEY	724	2656	3268
SANTA MARIA	468	1670	1596	WORCESTER	1191	3594	3801	AKRON	1059	2966	3528	CHARLESTON	659	2255	2740
STOCKTON	541	1509	1684				CINCINNATI ABBE OB	868	2471	2863	ELKINS	799	3000	3464	
				MICHIGAN				CLEVELAND	1015	2885	3434	HUNTINGTON	710	2235	2747
COLORADO				ALPENA	1364	4315	4655	COLUMBUS	977	2786	3323	PARKERSBURG	788	2437	2836
ALAMOSA	1662	5105	5048	DETROIT	1102	3242	3472	DAYTON	1004	2902	3274				
COLORADO SPRINGS	1172	3572	3640	DETROIT METRO	1189	3394	3624	MANSFIELD	1017	2883	3318	WISCONSIN			
DENVER	1277	3559	3398	FLINT	1240	3584	3939	TOLEDO	1197	3462	3656	GREEN BAY	1487	4313	4589
GRAND JUNCTION	1487	3608	3431	GRAND RAPIDS	1212	3614	3809	YOUNGSTOWN	1077	3226	3614	LA CROSS	1453	4119	4321
PUEBLO	1192	3245	3190	HOUGHTON LAKE	1380	4000	4648				MADISON	1416	4163	4439	
				LANSING	1233	3694	3878	OKLAHOMA				WILWAUKEE	1340	3796	4165
CONNECTICUT				MARQUETTE U	1482	4367	4532	OKLAHOMA CITY	922	2207	2285				
BRIDGEPORT	984	2529	2919	MUSKOGEE	1229	3637	3787	TULSA	951	2237	2282	WYOMING			
HARTFORD	1134	3181	3600	SAULT STE MARIE	1566	4891	5028				CASPER	1432	4391	4227	
							OREGON				CHEYENNE	1264	4134	3993	
DELAWARE				MINNESOTA				ASTORIA	803	3051	2892	LANDER	1451	4541	4526
WILMINGTON	886	2388	2827	DULUTH	1843	5605	5519	BURNS U	1184	3970	4133				
				INTERNATIONAL FALLS	2027	5904	6113	EUGENE	790	2640	2682				
DIST. OF COLUMBIA				MINNEAPOLIS	1642	4589	4730	MEACHAM	1284	4546	4319				
WASHINGTON DULLES	837	2599	2924	ROCHESTER	1611	4624	4742	MEDFORD	809	2424	2852				
WASHINGTON NATIONAL	677	1891	2481	ST CLOUD	1779	5038	5136	PINOLETON	1064	2937	3138				
							PORTLAND	832	2512	2748					
FLORIDA				MISSISSIPPI				SALEM	845	2753	2735				
APALACHICOLA U	40	458	866	JACKSON	327	1047	1465	SEXTON SUMMIT R	1059	3958	3372				
DAYTONA BEACH	0	264	550	MERIDIAN	259	946	1547				PENNSYLVANIA				
FORT MYERS	0	139	284				ALLNTOWN	1036	2915	3332					
JACKSONVILLE	31	496	845	MISSOURI				ERIC	1077	3234	3720				
KEY WEST	0	24	94	COLUMBIA REGIONAL	1187	3031	3027	HARRISBURG	991	2626	3065				
LAKELAND U	0	223	416	KANSAS CITY	1272	3153	3086	PHILADELPHIA	897	2428	2789				
MIAMI	0	94	122	ST JOSEPH	1281	3237	3266	PITTSBURGH	957	2895	3418				
ORLANDO	0	212	442	ST LOUIS	1083	2911	2846	SCRANTON	1145	3401	3580				
PENSACOLA	68	524	1007	SPRINGFIELD	987	2552	2747	WILLIAMSPORT	1087	3280	3435				
TALLAHASSEE	31	588	1019							RHODE ISLAND					
TAMPA	0	230	443	MONTANA				BLOOMINGTON	943	2673	2936				
WEST PALM BEACH	0	106	183	BILLINGS	1313	4085	4132	PROVIDENCE	1028	2940	3278				
				GLASGOW	1692	5270	5180				SOUTH CAROLINA				
GEORGIA				GREAT FALLS	1397	4441	4330	CHARLESTON	131	751	1553				
ATHENS	377	1400	1858	HAVRE	1585	5058	5058	CHARLESTON U	133	685	1177				

STORM SUMMARY

JANUARY 1974

STATE	TORNADOES					HAILSTORMS				WINDSTORMS				LIGHTNING				HEAVY SNOWSTORMS AND BLIZZARDS				ICE STORMS				ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	DAMAGE	DEATHS	INJURIES	↑ DAMAGE		DEATHS	INJURIES	↑ DAMAGE		DEATHS	INJURIES	↑ DAMAGE		DEATHS	INJURIES	↑ DAMAGE		DEATHS	INJURIES	↑ DAMAGE					
								PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS				
Alabama	5	3	1	6	5					7	5																		
Alaska									?	?	6								?	?	?								
Arizona *																													
Arkansas	1	1		2	4																								
California													1								?	?							
Colorado																													
Connecticut																5													
Delaware																													
Florida	1	1		4	5																								
Georgia	5	3		1	5																								
Hawaii	1	1																											
Idaho										1	4															5			
Illinois											3															8			
Indiana										7	4															?			
Iowa *																													
Kansas																													
Kentucky											4																		
Louisiana	2	1			4					3	5																		
Maine									1	10	3																		
Maryland & D.C.	1	1			3						4																		
Massachusetts																													
Michigan											5																		
Minnesota *											5																		
Mississippi	5	1		9	5					16	5																		
Missouri																													
Montana																													
Nebraska *											6															5			
Nevada											4																		
New Hampshire											5																		
New Jersey																													
New Mexico *																													
New York									1	?	6																		
North Carolina *																													
North Dakota *																													
Ohio	1	1		2	5					7	5															2			
Oklahoma																													
Oregon										?	?	?																	
Pacific Area																													
Pennsylvania																													
Puerto Rico *																													
Rhode Island *																													
South Carolina																													
South Dakota *																													
Tennessee																													
Texas	2	2		3	6				6		7	5														5			
Utah																													
Vermont																													
Virginia											5																		
Virgin Islands *											3															?			
Washington											6															4			
West Virginia											4															?			
Wisconsin *																										7			
Wyoming											2	6														C			

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Herbert J. Thompson and Ray J. Haley,
Office of Hydrology

The extensive flooding which occurred in many areas of the country during January was marked by a major flood in the Pacific Slope Drainage with record crest stages reported at several locations. This flooding was comparable to that which occurred in 1955 and 1964 with preliminary estimates of damage approaching \$200 million, and estimates for many areas not yet available.

Record flooding also occurred in the Guyandot River Basin in West Virginia with

major flooding in other portions of the Ohio Drainage and the Lower Mississippi Basin. Snowmelt flooding was frequent throughout the Upper Midwest, in many cases complicated by ice jams. Minor to moderate flooding occurred along the South Atlantic Slope Drainage and the East and West Gulf Coast Drainages.

Hydrologic events of unusual significance or involving loss of life or property damage are discussed in more detail below.

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
ST. LAWRENCE DRAINAGE			
Grand River Basin (Michigan)	A rise in December from snowmelt and rain crested on December 31. The stream then receded slowly until near the middle of the month when snowmelt augmented by about 2 inches of rain January 19-23, and up to 1 inch on the 26th-27th, caused a rise which flooded lowland areas in Ionia, Kent, and Ottawa counties. Numerous roads and 150 to 175 dwellings were affected but only a few evacuations occurred. Minor flooding also occurred along the Red Cedar River at Williamston and East Lansing.	0	N.A.
Maumee River Basin	Snow cover over the basin ranged from 4 to 18 inches with water equivalent of 2 to 3.5 inches during the first part of the month. Melting of this snow caused significant flooding during the latter half of the month. Crests stages ranged from 2 feet in the lower reaches to nearly 8 feet above flood stage on some of the headwater streams.	0	N.A.
ATLANTIC SLOPE DRAINAGE			
Pee Dee River Basin	Flooding occurred in the vicinity of Pee Dee, SC, with logging operations affected. Machinery was evacuated successfully.	0	0
Santee River Basin	Rainfall of 2 to 2.5 inches fell over the headwaters of the Broad and Saluda Rivers on January 1. Minor flooding occurred on the Broad River around Blair, SC, and above Lake Greenwood on the Saluda River. Downstream on the Congaree River lowland flooding occurred with damage to a bridge under construction estimated at \$5,000.	0	5

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
EAST GULF OF MEXICO DRAINAGE			
Tombigbee River Basin	Flooding which began late in December extended well into January. Stages were generally receding along the Black Warrior River but conditions worsened along the Tombigbee River as the above normal rainfall persisted during the month. Several distinct crests of up to 14 feet above flood stage occurred along the Tombigbee as the lower reaches of the stream remained above flood stage the entire month. Later in the month two short periods of minor flooding were reported along the Black Warrior. Damage over and above those reported in December was estimated at \$775,600 along the main stem of the Tombigbee, \$256,400 on the East Fork, and \$72,700 on Tibbee Creek. Damage was about 70 percent agricultural, 15 percent to roads and railroads, and 15 percent urban.	0	1,105
Pascagoula River Basin	Flooding continued at the beginning of the month from December. Late in the month Tallahala Creek flooded lower sections of Laurel, MS, and several families had to be evacuated.	0	N.A.
Pearl River Basin	Rainfall during January was well above normal with most stations reporting monthly totals of 8 to 15 inches. Highest total was at Vicksburg, MS, which had over 18 inches. The flooding which began late in December continued throughout the month along most of the stream.	0	395
UPPER MISSISSIPPI BASIN			
Rock River Basin	Snowfall over the basin was well above average during the first half of the month. Warming temperatures and two periods of rainfall each averaging 1.5 to 2.0 inches caused significant flooding along the Rock River and several of its tributaries including the Pecatonica and Kishwaukee Rivers. On the lower Rock River two significant flood crests occurred.	0	N.A.
Iowa, Skunk and Des Moines River Basins	Mild temperatures with snowmelt and rainfall of 0.25 to 1.0 inches on the 19th and 1.0 to 1.5 inches on the 26th caused rises on streams in southeastern Iowa. Minor flooding occurred along the Iowa and Skunk Rivers. A large ice jam formed on the Des Moines extending from Farmington to the mouth. The resulting backwater caused flooding in the small town of Bonaparte.	0	25
Upper Mississippi and Illinois Rivers	An unseasonably heavy accumulation of snow occurred during the latter part of December with up to 12 inches reported over the Upper Mississippi watershed. A warming trend with attendant snowmelt augmented by general	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
UPPER MISSISSIPPI BASIN-Con't			
	<p>heavy rains caused rises on most streams in the area with flooding on the Mississippi late in January from Hannibal, MO, downstream. Crests of up to about 3 feet over flood stage were reported. Flooding occurred along the entire length of the Illinois River with crests 3 to 6 feet over flood stage. On the lower Illinois flooding lasted at least into March.</p>		
MISSOURI BASIN			
Kansas River Basin	<p>As a result of snowmelt, streams in eastern Kansas ran one-half to three-quarters bank-full on the 20th-26th. An ice jam below Lecompton, KS, caused 3 to 4 feet overflow of agricultural lands with no damage at this season of the year.</p>	0	0
Lower Missouri River Basin	<p>Snowmelt and ice action caused flooding on the Lower Missouri and some of its tributaries during the month. An ice jam on the Missouri above Atchison, KS, caused 4 to 5 feet overflow as far upstream as Rulo, NE, on the 17th-25th. Near Falls City, NE, 500 cattle were drowned when trapped by rising water behind a levee. When the ice jam broke the resulting flood wave caused crests of 2 feet over flood stage at Atchison, KS, and near flood stage at Lexington, MO. Ice jams also caused flooding along the 102, Platte, North Grand, Lamine, and Blackwater Rivers, all in Missouri.</p>	0	N.A.
OHIO BASIN			
Monongahela River Basin	<p>Heavy rains over the headwaters of the Monongahela River beginning on the 10th caused flooding along the West Fork, Tygart, and main stem of the Monongahela River. Crests ranged up to more than 7 feet over flood stage but overflows were generally in the order of 1 to 3 feet.</p>	0	N.A.
Little Kanawha, Kanawha, Guyandot, and Big Sandy River Basins	<p>Record flooding occurred along the Guyandot River and major flooding along the Tug Fork of the Big Sandy River on the 10th-12th with minor flooding along the Little Kanawha, Coal River tributary of the Kanawha, and the lower Big Sandy River. Rainfall during the period averaged about 4 inches over the Tug Fork and Guyandot Basins, 3 inches over the headwaters of the Kanawha, and 2 inches over the Little Kanawha. The greatest damage occurred in West Virginia along the Guyandot River, with an estimated loss of \$5 million in Logan County alone of which \$4 million was in the City of Logan. Damage of \$1.8 million was reported in Lincoln County, primarily in the city of Branchland, and \$1 million in Mingo County of which \$700,000 occurred in Williamson. Other</p>	0	9,325

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
OHIO BASIN-Con't			
<p>West Virginia counties reporting damage were Cabell, \$100,000; Wayne, \$160,000; and Kanawha, \$815,000. In Kentucky, Johnson County reported \$200,000 damage and Pike County \$250,000. Of the nearly \$9 million damage in West Virginia, \$6 million was to private property and \$1 million was for clearing debris.</p>			
<p>The crest stage of 44.3 feet at Branchland was 0.3 foot higher than the previous record stage which occurred in 1907, while at Logan the crest stage of 30.81 feet was 0.3 foot lower than that of 1913, but more than 4 feet lower than the record stage of 1963, making it the third highest stage of record at this point.</p>			
Kentucky River Basin	<p>Major flooding occurred in the basin as a result of heavy rains on the 9th-12th. Storm totals in excess of 4 inches were recorded at many points. Most seriously affected was the town of Jackson, KY, on the North Fork Kentucky River where a crest more than 7 feet over flood stage was observed.</p>	0	N.A.
Green River Basin	<p>Heavy precipitation fell over the basin on the 8th-10th with storm totals exceeding 5 inches at some points. Severe flooding occurred along the middle and lower reaches of the stream. Crest stages of 12 to 15.5 feet above flood stage were reported along the middle portion of the river. Flooding continued into February along the lower Green River.</p>	0	N.A.
Wabash River Basin	<p>The middle and lower Wabash and lower White Rivers were above flood stage as the month began. By the 8th all points had fallen below flood stage but remained at above-normal levels. Beginning on the 20th, warming temperatures and period of moderate rainfall completely melted the 3 to 10-inch snow cover over the middle and upper portions of the basin. Runoff was high due to saturated soil conditions.</p>	0	8,625
<p>The Wabash River below Lafayette, IN, crested at the highest stages recorded in the last 5 years. Large areas of bottomland, some agricultural levees, and numerous secondary roads were overflowed. Precautionary evacuation of several families in the Terre Haute, IN, area was necessary. Estimates of damage by the Corps of Engineers for principal areas involved are: Wabash River, Huntington Dam to Mt. Carmel, \$6,180,000 with 143,000 acres inundated; Embarrass River, Lincoln Damsite (mile 106) to Wabash River, \$484,000 with 26,000 acres inundated; White River, Pipe Creek to Wabash River, \$1,670,000 with 55,000 acres</p>			

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
OHIO BASIN-Con't			
	<p>inundated; Lower Eel River, Cagles Mill Dam to White River, \$44,000 with 20,000 acres inundated; and East Fork White River, Columbus to White River, \$242,000 with 29,000 acres inundated. Less than 10 percent of this damage was to crops. Flooding in this basin extended into February.</p>		
Cumberland River Basin	<p>Moderate flooding occurred along portions of the Upper and Middle Cumberland River, and the Red, Harpeth, and Stones Rivers which are major tributaries of the Cumberland in Tennessee. General rains of 0.5 to 1.0 inch on the 8th and 9th and heavy rains of 3 to 4 inches on the 10th were the cause of the flooding. Damage in the city of Pineville and Bell County, KY amounted to \$674,000 with 200 dwellings affected and 2,000 acres inundated. Savings from warnings issued were estimated at \$250,000.</p> <p>Crest stages were not unusually high in the Upper Cumberland area but at Nashville and Clarksville, TN, they were the highest since 1962. However, damage was minimal on the main stem, probably as a result of adequate warnings. Moderate damage occurred along the Harpeth and Stones Rivers and was estimated at \$339,000 with 50 dwellings affected and 5,000 acres inundated.</p>	0	N.A.
Tennessee River Basin	<p>Heavy rainfall during the 8th-10th over the Elk and Duck River basins caused flooding along those streams. Storm totals for the period were 6-7 inches. Crest stages were 4.5 feet over flood stage on the Elk River and 8-11 feet over flood stage on the Duck River. The lower reaches of the main stem of the Tennessee River were above flood stage most or all of the month.</p>	0	N.A.
Ohio River	<p>Heavy rains during the middle of the month over tributary streams along the eastern side of the basin and snowmelt runoff from the Wabash Basin combined to produce flooding along the Ohio River from West Virginia to the mouth. In the upper reaches flooding was only of 1 to 2 days duration and crests were 1 to 2 feet over flood stage. The extreme lower end of the Ohio was in flood the entire month with crests up to 14 feet above flood stage.</p>	0	N.A.
WHITE BASIN			
White, Black, and Cache Rivers	<p>The Cache and lower White Rivers remained above flood stage the entire month aided by heavy rain on the 10th-11th which also brought the lower Black River back over flood stage.</p>	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
RED BASIN			
Sulphur River	There were two periods of heavy rainfall during the month. From 0.75 to 1.50 inch occurred on the 9th-11th and more than 2 inches on the 18th-20th. Both storms produced flooding at Hagansport, TX, with crests about 3 feet over flood stage. Downstream at Naples, TX, minor flooding continued from December to the first of the month, followed by more significant flooding the last half of the month caused by the above mentioned rain, and extending into February.	0	N.A.
Ouachita, Black and Red Rivers	Much above normal rainfall occurred over most of Louisiana this month. It was the second wettest January of record at Alexandria. Monthly totals over the Ouachita - Black Basin ranged from about 10 to over 17 inches. Flooding occurred along the Ouachita and Black Rivers and the Red River below Alexandria. There are no official reporting stations below Alexandria, but flooding was reported to have begun about the 26th.	0	N.A.
LOWER MISSISSIPPI BASIN			
St. Francis River	Flooding which began in December continued into the first part of January. Rainfall on the 18th-20th caused a rise to above flood stage the last of the month which continued into February on the lower St. Francis.	0	N.A.
Tallahatchie, Yazoo and Big Black Rivers	Flooding which began in December continued throughout the month on these streams maintained by the abnormally heavy rainfall during the month. Rainfall totals for January ranged up to the nearly 19 inches reported at Vicksburg, MS. Most seriously affected was the Yazoo Basin where many roads were closed and 42 families were evacuated from portions of Sharkey, Issaquens, and Warren counties.	0	N.A.
Lower Mississippi River	The rise which began on the Lower Mississippi in December continued throughout January going above flood stage in the upper reach early in the month and in the reach from Vicksburg, MS, to Donaldsonville, LA, later in the month. This rise was maintained by heavy inflow from the Ohio River Basin the middle of January. At all points crest stages occurred in February. The most serious flooding occurred upstream with nearly 7 feet of overflow into the unprotected lowlands of Tennessee.	0	N.A.
WEST GULF OF MEXICO DRAINAGE			
Mermentau and Calcasieu Basins	Abnormally heavy rainfall occurred over both basins during January with monthly totals ranging up to 15.43 inches at Mermentau, LA, and from 11 to over 14 inches in the Calcasieu Basin. Two periods of flooding occurred	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
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WEST GULF OF MEXICO DRAINAGE-Con't

in both basins.

Sabine, Neches and Trinity Rivers	Five periods of significant rainfall occurred over north central and northeast Texas during January with amounts generally 1 to 2 inches each time but ranging up to 4 inches in some areas. In southeast Texas general rainfall occurred during the 19th-26th with the heaviest amounts, up to 5 inches, reported on the 19th-20th. Flooding occurred along most of the length of the Sabine River with crests generally 3 to 7 feet over flood stage. Damage appears to have been minor except in the Deweyville area where the river was above flood stage the entire month and some property loss occurred. Flooding also occurred along much of the Neches River with crests generally in the range of 2 to 5 feet over flood stage. Damage of \$81,000 was estimated by the Corps of Engineers for the reach from Rockland down to Spurger Dam B on the Upper Neches.	0	N.A.
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Most seriously affected were Hardin, Orange, and Jefferson Counties. An emergency request of \$177,000 was needed for road repairs in Orange County. Damage along Village Creek and Pine Island Bayou near Beaumont was estimated at \$200,000.

Sharp rises occurred along the Upper Trinity River. At Trinidad the river rose 24 feet in 4 days with minor flooding. Along the lower Trinity flooding occurred from Goodrich to Moss Bluff with crests 3 to 5 feet over flood stage. Releases from Lake Livingston were a factor in this flooding.

San Jacinto Basin	Flooding occurred along the San Jacinto River from Conroe, TX down to Houston and on the East Fork from Cleveland to Houston. Some property damage was reported in the Conroe area of Montgomery County. No river stage reports are received from that area.	0	N.A.
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PACIFIC SLOPE DRAINAGE

Los Angeles area Streams	January rainfall totalled 8.35 inches in Los Angeles as compared with a normal of 3.07 inches. This total was among the five highest in the past 40 years. However, dry soil conditions minimized runoff and low reservoir levels controlled streamflow so that the only stream flooding was at the mouths of the streams and was minor. Street flooding was common in Los Angeles and Orange counties.	0	0
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Sacramento River Basin	Rainfall over the headwaters of the Sacramento River was more than 200 percent of normal for the month. Most of this rain-	0	N.A.
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GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
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PACIFIC SLOPE DRAINAGE-Con't

fall was concentrated in the period of the 12th-20th. Flood stage was exceeded by 5 to 7 feet from Bend Bridge to Vina Woodson Bridge on the Upper Sacramento with warning stage exceeded at most points below. Serious flooding also occurred on smaller tributaries of the Sacramento. Damage in Shasta County was estimated at \$3 million with damage heavy in Tehama and Glen counties also. Agricultural lands were flooded and levees, roads, bridges, and waterways were damaged. More than \$1 million damage occurred in the city of Dunsmuir on the upper Sacramento.

Russian River Basin	Major flooding occurred when a storm front stalled over the basin depositing 6-12 inches of rain in a 3-day period on the 15th-17th. Crest stages ranged up to 11.5 feet over flood stage at Summerhome, CA.	0	7,325
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Eel, Trinity and Klamath River Basins	The storm of the 15th-19th caused major flood damage, particularly along smaller tributaries. Preliminary estimates include \$6 million damage and 4,000 acres inundated in Humboldt county; \$5.5 million damage in Trinity County, and \$5 million damage in Siskiyou County. Heavy damage also occurred in Mendocino County.	3	N.A.
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Rogue, Coquille, and Umpqua Basins	The month featured record, near record, or general major flooding throughout the Medford River District. Flooding was widespread over all of western Oregon but seemed to be concentrated west of the Cascade mountains and centered over southern Oregon and northern California. Major damage and at least three deaths directly attributed to the flood resulted.	3	44,088
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The two primary river drainage systems, the Rogue and Umpqua Rivers along with the shorter Coquille River on the coasts, were directly involved. Portions of the Rogue and Umpqua drainages either exceeded prior record flood levels or approached record levels.

The more significant flooding occurred along the Applegate River draining the mountain area along the Oregon-California border and along Cow Creek feeding into the south Umpqua River and the South Fork, Umpqua River. The river gaging station on the Applegate River near the town of Applegate, OR, recorded an alltime high of 20.41 feet, nearly one foot over the previous record established during the December 1964 flood. The gaging station on Cow Creek near Riddle, OR, recorded a crest slightly over the previous record of 1964 at 27.89 feet. Flood stage at Applegate is 13 feet and 18 feet near Riddle, OR. The crest readings at Winston, and Roseburg, OR, while not exceeding the

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
PACIFIC SLOPE DRAINAGE-Con't			
	1964 flood mark, did exceed the prior record flood set in 1955.		
	<p>Long southwesterly flow of semi-tropical moisture began to affect the southern Oregon weather pattern on the 12th, changing from an extensive cold period with solidly frozen ground, to a mild warm, rainy period. Freezing levels climbed steadily and by the 14th had reached close to 10,000 feet m.s.l. Heavy rain began on the coast on the 12th-13th, peaking over the interior late on the 15th. Four-day storm totals approached 13 inches with the heaviest concentration over the Applegate River and Cow Creek drainages.</p> <p>Heaviest losses occurred in Douglas County with more than \$16,600,000 damage and 3200 acres inundated. Nearly 500 residences were affected. In Jackson County more than 100 residences were affected and 800 acres inundated with damage of nearly \$8,800,000, about 30 percent of which was to farm buildings and improvements. In Josephine County, 1200 acres were inundated, 30 residences were affected, and damage totaled more than \$15,200,000, of which 60 percent was to farm buildings and improvements. Coos County reported damage of over \$2,500,000 with 26,000 acres inundated. Curry County reported losses of \$860,000. Costs of \$7 million to rehabilitate facilities in National Forests are included in the above figures.</p>		
Spokane Pend- Oreille and Kootenai Basins	<p>Major flooding with extensive damage occurred in northern Idaho and western Montana during January. Following a two-week cold spell with subzero temperatures, a January thaw started on the 14th followed by a series of storms from the southwest with warm, moist air and heavy rains, especially over northern Idaho, causing the widespread flooding.</p> <p>Heavy rains occurred across northern Idaho on the 14th, 15th, 16th and 17th, with 9 inches reported at Mullan, near the headwaters of the Coeur D'Alene River. Mullan, at an elevation of 3,300 feet had a snow-depth decrease from 2 feet to 1 inch during this period.</p> <p>The initial flooding began on the 14th on the smaller streams, with rain and melting snow causing rapid runoff in the steeper terrain. The rampaging creeks picked up the ice accumulation from the preceding cold spell, and ice jams at bridges and culverts were frequent and devastating. Bridges were washed out and roads cut. Troy and</p>	0	31,872

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
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PACIFIC SLOPE DRAINAGE-Con't

Libby, in Lincoln County, MT, were surrounded by waters from overflowing creeks on the 15th and 16th. Homes were flooded at Pinehurst, Idaho, and Missoula, MT, and several other points.

Rivers behaved erratically until the ice jams cleared, and great surges of water raced downstream. One witness reported that the Blackfoot River near Missoula "rose 25 feet in 30 minutes," above an ice jam.

The Coeur D'Alene and St. Joe Rivers in Idaho were the major streams to reach flood stage in the Spokane River District. The flood knocked out river gages and communications on both rivers. Local residents were evacuated, and were not available to make backup river readings just before and during the crest period.

It was the third greatest runoff volume of record (82 years at Spokane), ranking after 1933 and 1894. The Coeur D'Alene River at Enaville set up a new record stage of 81.3 feet. The previous record crest was 79.5 feet in 1933. The St. Joe River crested at 41.4 feet at St. Maries, ID, where the record crest is 42.2 feet set in 1933.

Damage was particularly heavy at St. Maries on the St. Joe River where 50 homes were destroyed and hundreds of acres covered. Many other towns on the St. Joe River in Benewah County were evacuated. More than 800 people were evacuated from Pinehurst, ID. Libby, MT, on the Kootenai River was isolated when U.S. Highway 2 was cut on both sides of the town. More than 1,500 people were evacuated, and 5 trailer houses and at least one home were washed away.

Preliminary estimates of damage by counties in Idaho are as follows: Shoshone, \$11 million; Kootenai, \$7.5 million; Benewah, \$5.5 million; Bonner, \$4 million; and Boundary, \$1.8 million. In Montana; Lincoln, \$1,718,000; Deer Lodge, \$1,460,000; Sanders, \$110,000; Missoula, \$86,000; and Flathead, \$12,000.

Yakima River Basin	Severe flooding occurred in the Yakima Valley of Washington as ice jams in the river and its tributaries broke up sending water cascading through smaller towns and over highways. The flooding began late on the 14th when rain and moderating temperatures removed a 7-inch snowcover in six hours on the valley floor. Extensive flooding occurred along Ahtanum Creek, Toppenish Creek, and Satus Creek, with some 1,000 families affected and 450 of these displaced. Other damage involved	0	13,792
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GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
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PACIFIC SLOPE DRAINAGE-Con't

washed-out highways, culverts, and bridges which closed Highway 97 between Toppenish and Goldendale for six weeks. Some 90 head of cattle drowned along the Yakima River near Sunnyside, WA. The flood crest discharge on the Yakima River near Parker was the third largest volume for the past 58 years of record, ranking after December 1933 and May 1948. Crest discharge on the Yakima River at Kiona ranked second in volume to the flood of December 1933.

Snake River Basin in Idaho	Significant flooding and damage from rapidly fluctuating stages due to ice jams and mud slides occurred during January along the Snake River and several major tributaries, including the Weiser, Payette, and Little Salmon Rivers. The unseasonable cold spell that began the last part of December and lasted through the first 12 days of January froze over most streams in southern Idaho. Sub-zero nighttime temperatures were reported in the Snake River Basin of southwestern Idaho. Boise recorded 5 degrees below zero on the 9th. During this period, 4 to 5 inches of snow accumulated over the lower elevations.	0	N.A.
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On the 13th, moderating temperatures set in, and warm rains began over southwest Idaho and through the north central mountains which extended through the 16th with the freezing level rising to near 10,000 feet. With a generous snowpack already at the lower elevations, coupled with rising temperatures and an abundance of rainfall, the snowpack became saturated.

On the 5th ice began to pile up in the stream bed above Farewell Bend on the Snake River. Ice jams began developing at various places along the Weiser River. At 8 a.m. on the 5th a major jam developed on the Weiser River at the Pressley bridge. Other jams developed farther upstream, spilling 6 to 12 inches of water over the banks in the vicinity of the jams.

On the 10th, ice jams developed on the main Salmon River and extended from the confluence of the North Fork upstream some 26 miles. Water spilled over the banks at several places, but the only damage reported was minor to a subdivision below the Carmen Bridge.

On the 12th rains and chinook winds set in, increasing snowmelt. This added to the stream flow dislodging more ice, building jams, and backing water upstream into adjacent lowlands. At Farewell Bend on the Snake River, the stream rose rapidly and began flooding the Weiser Annex that is across the Snake River

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins
and
Streams

FLOOD EVENT

Lives
Lost Preliminary Estimate
of Property Damage
(thousands of dollars)

PACIFIC SLOPE DRAINAGE-Con't

on the Oregon side to the west of Weiser. At the first of the flooding six families were evacuated and others were on standby should the water continue to rise. At about 2 p.m. on the 15th, the jam at Farewell Bend broke loose with a rapid drop in the flooded area.

During this same period a jam built on the Payette River below Horseshoe Bend above Montour. Near noontime on the 15th, this ice jam suddenly broke loose flooding the town of Montour and adjacent farm residences and farmland with two or more feet of water and blocks of ice. No life was lost, although 15 head of cattle perished. There was heavy damage to farmland, residences, and roadways. Three families were reported to have been evacuated.

In Custer County at Challis, Garden Creek began to rise rapidly breaking ice loose and piling it up at the bridges diverting the streamflow through the residential area of Challis. Water seeped into many basements, and two bridges were reported to be lost.

At the Warfield Bridge on the Weiser River near Cambridge, ID, water was backed up several feet deep by an ice jam at the mouth of Pine Creek flooding three residences. Damage to these homes was considerable. The 15th was the beginning of major flooding on the Weiser River. The volume of water increased as several ice jams upstream gave way developing a large jam at the Pressley Bridge. The ice moving into this jam wiped out the gaging station at Weiser 10 ENE. The large volume of water and ice broke through the jam only to re-establish at the lower Unity Bridge forcing water to flow over farmland and through some residential sections. Some 100 residences were damaged by these flood waters. The peak flow was reported on the night of the 16th, with a continuous decrease thereafter. The damage to private property is estimated at \$400,000.

On the 16th the Potlatch River, a northern tributary of the Clearwater River, jammed with ice and overflowed onto the highway between Juliaetta and Arrow. Water was reported to have been 6 feet deep and ice chunks of 3 to 4 feet square were piled 6 feet high on the roadway.

On the 15th the Little Salmon River began to rise, developing an ice jam at the northernmost portion of the New Meadows plateau. Should this jam have broken suddenly, severe

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
PACIFIC SLOPE DRAINAGE-Con't			
	<p>flooding would have resulted downstream. Downstream from the New Meadows plateau the canyon walls were saturated by melting snow and heavy rain. Mud slides developed sending tons of rock and soil with other debris thundering down the hillsides. Two major slides developed; one about 2 miles south of Pollock dumped some 350,000 cubic feet of rock and soil across the Little Salmon River forcing the stream to flow over the highway washing out some 3,000 feet of roadway. This same slide, in all practicality, wiped out the Morganroth Ranch. Mud, boulders, and debris poured out of the Indian Creek canyon for about 24 hours spreading to a depth of several feet over the pasture land. Several head of sheep were lost in the muck and mire. At the peak of the onslaught the roaring water and debris burst across the Little Salmon River slamming into the highway grade and was reported to have curled up similar to an ocean wave.</p> <p>On the 18th the flow on the Little Salmon River decreased considerably as the water level dropped about 4 feet. The Idaho Fish and Game Department is concerned about the potential fish loss due to the excessive silt and water erosion of the stream. Many of the spawning beds for chinook salmon and steelhead have been either destroyed or covered with several feet of silt and sand. This damage may not be assessable for several years.</p> <p>On the 23d Antelope Creek in Butte County lacked drainage to carry the water to spread out over the flats. Culverts and other drainage systems were plugged by debris, and when cleared, the water receded. Several residences and businesses in the area were flooded with 9 or more inches of water.</p>		
Palouse River Basin	The Palouse River flooded 12 businesses in Palouse, WA, on the 16th. A new 18-year record was set at Colfax, Wa, where the crest stage was 13.45 feet, exceeding the 10.75 feet crest reported on Dec. 24, 1964.	0	77
Klickitat River Basin	Chinook weather which removed 10 inches of snow cover caused damaging floods in the Klickitat basin. Roads, five bridges, and about 100 culverts were washed out and 17 homes destroyed. The water system of Klickitat was destroyed as the community was nearly isolated. The Klickitat River near Pitt, WA, crested at 17.12 feet on the 16th, exceeding the previous record of 14.34 feet set in December 1964.	0	479
White Salmon and	Damaging flooding occurred in the portions of Klickitat and Skamania Counties of Wash-	0	N.A.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
PACIFIC SLOPE DRAINAGE-Con't			
Wind River Basins	ington drained by these streams. Loss of a 27-inch snowcover at Glenwood, WA, was reflected in the record crest of 12.85 feet on the White Salmon River near Underwood. A new record crest of 21.91 feet was also reported at Carson, WA, on the Wind River. The previous record of 19.29 was recorded Jan. 20, 1972.		
Willamette River and North Coastal Streams in Oregon	Precipitation in northwestern Oregon was nearly twice normal during January. Accumulated amounts for October through January averaged 175 percent to 185 percent of normal for the second wettest such season since the record was set in the winter of 1963-1964. Monthly totals were 10-20 inches in the Willamette Valley, 12-18 inches in the Northern Cascades, and 14-24 inches along the northern coastal area. Most stations recorded over 3 inches of rain on the 15th with up to 4.25 inches recorded at Alsea Fish Hatchery. Extensive flooding occurred in western Oregon including the lower Willamette Valley where precipitation between the 12th and 17th totaled 9-14 inches and pushed streams 3-8 feet over flood stage downstream from Harrisburg. A new record was set on the Mary's River at Philomath which crested at 20.9 feet, exceeding the old record of 20.72 feet of December 1964. Several other rivers experienced their second or third highest flood of record which included a stage of 45.04 feet on the South Yamhill River at Whiteson, 14.4 feet on the Molalla River at Canby, 35.14 feet on the Tualatin River at Farmington, 25.63 feet at Oswego 3 SW, 24.54 feet on the Alsea River at Tidewater, and 28.06 feet on the Siuslaw River at Mapleton. Inundated lands were particularly bothersome in the Tualatin Basin where some 200 families were evacuated in the area. Families were also evacuated along the Clackamas River, Johnson Creek, and the Wilson River near Tillamook. The American Red Cross reported that 49 homes and businesses received major flood damage and 110 homes experienced minor damage. Roads were flooded in scattered locations and small mudslides also blocked some roads. No lives were lost directly from flooding even though 17 counties were declared disaster areas. Damage totaled \$4,398,000 along the coastal streams and \$13,301,000 in the Willamette Valley.	0	17,699
Western Washington Streams	Several western Washington rivers rose to above flood levels between the 15th and the 19th as a result of prolonged heavy warm rain which began the 12th. Highest river levels occurred on the 16th and 17th.	0	1,951

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
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PACIFIC SLOPE DRAINAGE-Con't

Precipitation gages on the west slopes of the Cascade Mountains registered totals of from 5.5 to 11 inches of rain for the five days of the 13th through the 17th. During this same interval lowland gages measured totals of from 2 to 6 inches which tends to indicate that much of the headwaters precipitation was the result of a strong orographic influence.

Dominant cold high pressure during the first eleven days of the month over all of the Pacific Northwest began to be eroded by a strong warm southwesterly flow during the morning of the 12th. The warm and wet air overran the cold from central Oregon north-eastward over the crest of the Cascades and into southern British Columbia, finally reaching the ground over all of Washington and Oregon by the evening of the 13th. The freezing level over western Washington rose from near 2,000 feet on the morning of the 12th to 7,200 feet by the afternoon of the 13th and remained near 6,000 feet until the morning of the 16th.

Mountain snow pack at Stampede Pass in the Cascades dropped from a depth of 98 inches on the 13th to 80 inches on the 17th in the warm air and rain.

Flooding on these streams was not of the same magnitude as that experienced to the east and south. Preliminary estimates of damage by the Corps of Engineers include: \$155,000 in the Skagit Basin; \$700,000 in the Snohomish Basin; \$450,000 in the Chehalis Basin; and \$646,000 in the Cowlitz and Lewis Basins.

ALASKA

Saga-
vanirktok
River

Early in the month warm temperatures and a rare rainfall caused flooding over the ice on the Sagavanirktok River along the proposed Alaska pipeline route. Temperatures were reported above freezing for a two-day period along the entire north slope. Barrow had a record high temperature of 36° on the 4th and Barter Island reported 39° the same day. Barrow also had 0.18 inch of rain on the 4th, equal to the average water equivalent for the entire month of January. Bettles, on the south side of the range, had 0.29 inch of rain and snow mixed from the same storm.

0

N.A.

Barter Island collected 0.04 inch of rain and Deadhorse, the closest official station to the Sagavanirktok River also reported rainfall, but did not report the amount. An all-terrain-vehicle operator hauling oil well drilling equipment on the river ice reported up to four feet of water flowing over the ice during the period. A second report, from the Superintendent of the pipeline construc-

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS

JANUARY 1974

Basins and Streams	FLOOD EVENT	Lives Lost	Preliminary Estimate of Property Damage (thousands of dollars)
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PACIFIC SLOPE DRAINAGE-Con't

tion camp at Happy Valley, stated that 3 to 4 feet of water was covering the camp airstrip during the period also.

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

JANUARY 1974

River and station	Flood stage	Above flood stages -dates		Crest	
		From-	To-	Stage	Date
ST. LAWRENCE DRAINAGE					
Portage Creek:					
Vicksburg, MI	5	22	31	5.40	31
Red Cedar River:					
Williamston, MI	7	22	24	7.8	23
East Lansing, MI	7	23	24	7.23	23
Grand River:					
Comstock Park, MI	12	24	Feb 1	13.46	26
Clinton River:					
Mt. Clemens, MI	13	21	21	13.86	21
		27	27	14.50	27
Middle River Rouge:					
Garden City, MI	7	21	24	7.70	23
		26	28	7.51	26
Lower River Rouge:					
Inkster, MI	10	22	22	10.27	22
Huron River:					
Ann Arbor, MI	15	28	28	15.13	28
River Raisin:					
Monroe, MI (City)	8.5	3	4	9.20	3
		22	22	11.00	22
St. Marys:					
Decater, IN	15	19	31	22.8	22
St. Josephs:					
Montpelier, OH	10	Dec 29	Feb 2	10.46	Dec 29
		22	Feb 3	13.24	24
Blanchard:					
Ottawa, OH	10.5	20	23	17.0	21
Maumee:					
Fort Wayne, IN	15	21	1/	21.01	23
Defiance, OH	10	21	26	13.2	22
Napoleon, OH	10	21	24	12.0	22
Grand Rapids, OH	15	21	25	16.80	22
Sandusky:					
Upper Sandusky, OH	13	20	20	13.78	20
Tiffin, OH	8	20	22	9.50	22
Fremont, OH	10	20	22	12.3	20
ATLANTIC SLOPE DRAINAGE					
Roanoke:					
Williamston, NC	10	Dec 21	26	#11.2	A 8
Neuse:					
Neuse, NC	14	29	29	#14.0	29
Smithfield, NC	13	29	Feb 2	16.5	31
Cape Fear:					
Huske Lock and Dam, NC	42	29	Feb 1	44.9	31
Elizabethtown, NC	20	30	Feb 2	#23.0	31
Lumber:					
Lumberton, NC	9	2	13	10.2	8
Pee Dee:					
Pee Dee, SC	19	3	10	20.9	7
		25	1/	21.3	Feb 13
Broad:					
Blair, SC	14	1	4	19.3	2
		22	22	15.8	22
Reedy:					
Greenville, SC	9	Dec 31	1	10.5	1
Saluda:					
Pelzer, SC	9	1	1	10.7	1
Savannah:					
Millhaven-Wade 2 SE, GA	15	20	Feb 5	15.4	22
Clyo, GA	11	8	1/	15.8	Feb 26
Ocmulgee:					
Macon, GA	18	2	3	19.7	3
		30	30	18.9	30
Oconee:					
Milledgeville, GA	20	31	31	20.1	31
EAST GULF OF MEXICO DRAINAGE					
Apalachicola:					
Blountstown, FL	15	3	11	#18.6	8
		12	13	#15.8	13
		24	25	#15.9	24
		28	1/	#18.8	Feb 2
			1/	#19.7	Feb 11-13
Choctawhatchee:					
Newton, AL	19	3	3	#19.4	3
Caryville, FL	12	3	7	#13.5	5
Cahaba:					
Centreville, AL	23	Dec 31	1	27.8	1

River and station	Flood stage	Above flood stages -dates		Crest	
		From-	To-	Stage	Date
EAST GULF OF MEXICO DRAINAGE Continued					
Cahaba-Continued					
Suttle, AL	32	3	4	#32.6	4
Alabama:					
Millers Ferry L and D, AL	66	4	5	67.7	5
Claiborne, AL	40	6	7	#40.5	6-7
Old Town Creek:					
Tupelo, MS	21	4	6	23.4	4
		11	13	25.3	11
		25	26	23.2	26
Tibbee Creek:					
Tibbee, MS	23	12	15	26.17	13
		25	30	26.19	27
Black Warrior:					
Bankhead Lock and Dam, AL	15	10	10	#15.1	10
Warrior Lock and Dam, AL	30	Dec 27	4	#38.0	Dec 30
		12	15	#32.1	14
		30	Feb 1	#31.2	31
Tombigbee:					
Fulton, MS	16	Dec 26	1	16.83	Dec 27
			4	16.56	5
			11	18.72	12
			22	17.43	25
Armory, MS	20	4	6	21.47	4
		10	17	27.11	13
		20	21	21.50	21
		24	Feb 7	27.66	26
Aberdeen, MS	34	Dec 27	1	35.10	29
			19	40.55	13
			25	38.56	26
Columbus, MS	29	16	18	29.83	16
		29	Feb 1	30.76	30
Gainesville, AL	36	Dec 27	Feb 10	44.2	1
				45.2	21
				45.6	Feb 3
Demopolis Lock and Dam, AL	48	Dec 27	Feb 12	#59.4	2
				#52.2	10
				#54.7	15-16
				#52.6	28
				55.1	Feb 2
Coffeeville L and D, AL	43	Dec 28	1/	#53.7	6-7
				#51.3	17
				#51.5	22
				#51.4	30
Tallahala Creek:					
Laurel, MS	13	Dec 26	10	21.20	Dec 27
		25	Feb 2	15.80	28
Leaf:					
Beaumont, MS	20	Dec 27	4	28.20	Dec 30
		26	Feb 2	21.98	27
Chickasawhay:					
Enterprise, MS	20	Dec 26	1	28.39	Dec 28
Shubuta, MS	30	Dec 27	3	36.58	Dec 30
Pascagoula:					
Merrill, MS	22	Dec 30	0	24.8	Dec 31
Yockanookany:					
Ofahoma, MS	14	Dec 26	2	17.10	Dec 30
			7	17.10	11
			24	Feb 3	17.50
Pearl:					
Edinburg, MS	20	Dec 27	Feb 4	A24.30	13
Carthage, MS	17	Dec 26	Feb 6	A23.0	12
Jackson, MS	18	Dec 25	1/	A33.56	31
Monticello, MS	19	Dec 25	1/	A27.92	30
Columbia, MS	17	Dec 27	Feb 15	A23.68	31
Bogalusa, LA	15	Dec 23	1/	20.5	29-31
Pearl River, LA	12	Dec 28	1/	16.8	27-31
Upper Mississippi Basin					
Maquoketa River:					
Maquoketa, IA	13	27	27	13.12	27
Wapsipinicon River:					
De Witt, IA	10		31	10.6	27
East Branch Pecatonica River:					
Blanchardville, WI	17	27	29	18.45	27
Pecatonica River:					
Darlington, WI	11	27	27	12.0	27
Martintown, WI	11	21	Feb 5	16.3	31
Freeport, IL	13	28	Feb 3	14.3	31
Shirland, IL	12	24	Feb 7	14.5	31
Kishwaukee River:					
Perryville, IL	10	22	Feb 12	13.53	27
Green River:					
Geneseo, IL	8	22	Feb 3	10.45	29

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

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River and station	Flood stage	Above flood stages -dates		Crest		River and station	Flood stage	Above flood stages -dates		Crest	
		From--	To--	Stage	Date			From--	To--	Stage	Date
<u>Upper Mississippi Basin-Con't</u>						<u>Ohio Basin-Continued</u>					
Rock River:						West Fork-Con't:					
Joslin, IL	12	22	1/	16.8	29	Clarksburg, WV	7	11	12	9.67	11
Moline, IL	12	21	1/	14.1	24	Tygart:					
				13.9	31	Belington, WV	14	11	12	15.30	11
Iowa River:						Philippi, WV	17	11	12	19.06	11
Marshalltown, IA	13	31	31	13.68	31	Monongahela:					
Wapello, IA	10	30	31	13.8	31	Pt. Marion, PA (Lock 8)	26	11	12	27.0	11
South Skunk River:						Greensboro, PA	21	11	12	22.6	11
Oakloosa, IA	15	20	24	18.60	21	Charleroi, PA	26	11	12	33.4	12
				16.41	27	Elizabeth, PA	20	11	12	22.4	12
North Skunk River:						Braddock, PA	19	11	12	23.3	12
Sigourney, IA	16	27	28	16.71	27	Little Kanawha:					
				17.46	31	Glenville, WV	23	11	12	27.92	11
Skunk River:						Creston, WV	20	11	12	27.5	11
Brighton, IA	14	27	1/	15.70	30	Coal:					
Augusta, IA	15	27	28	16.6	27	Tornado, WV	25	11	12	26.9	11
Cedar Creek:						Guyandotte:					
Bussey, IA	16.5	21	21	17.71	21	Logan, WV	23	10	12	30.81	11
				19.81	27	Branchland, WV	30	11	13	44.31	12
Des Moines River:						Levisa Fork, Sandy:					
Eddyville, IA	15	20	29	17.46	22	Paintsville, KY	35	12	12	35.1	12
				19.16	27	Tug Fork Sandy:					
Salt River:						Williamson, WV	27	11	12	37.0	11
New London, MO	19	19	22	20.25	21	Kermit, WV	38	11	12	45.0	12
Illinois River:						Big Sandy:					
Morris, IL	13	22	31	16.66	27	Louisa, KY	45	12	13	47.84	13
La Salle, IL	20	22	Feb 9	26.20	28	Scioto:					
Peoria, IL	18	25	Feb 12	23.2	Feb 1	La Rue, OH	11	19	20	11.42	20
Havana, IL	14	23	1/	N		Prospect, OH	10	19	24	13.5	21
Bearstown, IL	14	22	1/	N		Circleville, OH	14	20	25	16.4	22
Meredosia, IL	32	23	1/	N		Piketon, OH	16	22	26	17.95	22
Meramec River:						South Fork Licking:					
Eureka, MO	18	22	24	18.4	23	Cynthiana, KY	20	11	11	20.49	11
Valley Park, MO	16	22	25	17.05	23	Licking:					
Big Muddy River:						Falmouth, KY	28	11	13	31.4	12
Murphysboro, IL	16	20	Feb 8	24.38	25	North Fork Kentucky:					
Mississippi River:						Hazard, KY	20	11	12	23.85	11
Keokuk, IA (Dam 19 TW)	16	30	30	16.05	30	Jackson, KY	29	10	13	36.35	11
Hannibal, MO	16	29	Feb 1	#17.2	31	Red:					
Louisiana, MO	15	29	Feb 1	#15.84	31	Clay City, KY	19	11	12	20.5	11
Clarksville, MO (Dam 24 TW)	25	29	Feb 1	#25.9	31	Kentucky:					
Winfield, MO (Dam 25 TW)	26	31	Feb 1	#26.2	Feb 1	Beattyville, KY	25	10	13	33.03	11
Grafton, IL	18	29	Feb 4	#20.7	Feb 1	Lock 10, KY (Upper)	25	11	15	30.2	13
Alton, IL (Dam 26 TW)	21	28	Feb 3	#23.2	30	Lock 4, KY	31	11	16	34.4	13
Chester, IL	27	28	Feb 4	#25.94	31	Brashear's Creek:					
Cape Girardeau, MO	32	24	Feb 6	#34.85	31, Feb 1	Taylorville, KY	20	11	11	26.2	11
Thebes, IL	33	26	Feb 5	#35.35	31	Rolling Fork:					
Missouri Basin						Boston, KY	40	11	14	46.7	13
One Hundred and Two River:						Barren:					
Rosendale, MO	13	21	23	17.7	21	Bowling Green, KY	28	11	12	#33.85	12
Platte River:						Green:					
Agency, MO	20	21	25	23.2	23	Munfordville, KY	28	11	14	#43.5	12
Kansas River:						Brownsville, KY	18	11	15	#31.5	13
Lecompton, KS	17	21	23	20.74	21	Rochester, KY	39	13	19	#40.66	16
Grand River:						Woodbury, KY	33	10	20	45.50	13
Chillicothe, MO	24	20	23	27.3	21	Livermore, KY	20	11	Feb 2	#26.10	18
				25.6	27	Calhoun, KY	23	11	Feb 4	#29.7	20
Sumner, MO	26	20	25	33.70	21	Eagle Creek:					
Brunswick	12	22	30	13.80	24	Zionsville, ID	7	18	19	9.18	19
Lamine River:						Vermilion:					
Clifton City, MO	19	17	18	22.74	18	Danville, IL	18	21	23	20.8	22
Blackwater River:						Embarrass:					
Valley City, MO	22	18	20	25.77	20	Ste. Marie, IL	18	Dec 27	1	20.91	Dec 28
Blue Lick, MO	25	20	26	28.63	23			Feb 1	1	20.45	Dec 23
Marais Des Cygnes River:						Lawrenceville, IL	11	Dec 28	5	18.85	Dec 31
Lacygne, KE	25	20	20	#25.10	20			Feb 6	6	18.51	Dec 25
South Grand River:						East Fork White:					
Rulo, NE	17	17	25	22.09	22	Seymour, ID	14	30	24	15.46	21
St. Joseph, MO	17	20	25	21.15	24	White:					
Atchison, KS	22	25	25	24.0	25	Anderson, ID	10	19	20	10.78	19
Lexington, MO	22	26	26	22.0	26	Nobleville, ID	14	20	21	14.9	20
Hermann, MO	21	23	Feb 1	26.3	28	Nora, ID	11	20	23	13.33	21
St. Charles, MO	25	27	Feb 1	28.0	29	Ravenswood, ID	6	30	23	7.3	21
Ohio Basin						Centerton, ID	602	21	23	#04.7	22
West Fork:						Spencer, ID	14	Dec 26	1	18.74	Dec 30
Weston, WV	17	11	11	18.55	11			Feb 1	1	16.37	Dec 23

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River and station	Flood stage	Above flood stages -dates		Crest	
		From-	To-	Stage	Date
<u>Ohio Basin-Continued</u>					
White-Con't:					
Elliston, IN	18	Dec 26	Feb 3	24.05	Dec 31
		20		24.10	24
Edwardsport, IN	15	Dec 27	4	21.0	Dec 31
		20	Feb 5	21.1	27
Petersburg, IN	16	Dec 28	5	19.61	3
		21	Feb 6	22.02	27
Hazleton, IN	16	22	Feb 7	23.1	28
Skillet Fork:					
Wayne City, IL	15	22	24	#17.99	23
Little Wabash:					
Wilcox, IL	16	Dec 25	2	#22.33	Dec 28
		19	Feb 2	#21.75	23
Carmi, IL	27	Dec 28	16	#30.57	3
		23	Feb 6	#29.72	31
Wabash:					
Bluffton, IN	10	20	24	15.2	21
Wabash, IN	12	21	24	14.40	21
		26	28	13.49	27
Lafayette, IN	11	Dec 26	1	17.84	Dec 28
		20	Feb 10	20.58	22
Covington, IN	16	Dec 27	2	21.65	Dec 30
		20	Feb 8	25.02	25
Montezuma, IN	14	Dec 26	4	21.08	Dec 28
		19	Feb 13	27.55	24
Clinton, IN	18	18	Feb 11	27.00	24
Terre Haute, IN	14	Dec 26	4	19.2	Dec 29
		19	Feb 12	22.8	25
Hutsonville, IL	20	Dec 29	5	21.8	2
		22	Feb 8	25.5	27
Riverton, IN	18	Dec 30	0	19.27	4
		22	Feb 8	22.10	28
Vincennes, IN	16	Dec 28	8	19.87	3
		22	Feb 10	24.06	29
Mt. Carmel, IL	17	Dec 30	7	21.0	4
		22	Feb 9	25.56	30
New Harmony, IN	15	1	8	#16.4	5
		24	Feb 9	#19.1	31
Poor Fork:					
Cumberland, KY	12	11	11	12.1	11
Harpeth:					
Kingston Springs, TN	15	10	12	25.3	11
Red:					
Port Royal, TN	30	10	13	39.4	11
Cumberland:					
Baxter Harlan W.F.O., KY	16	11	11	21.7	11
Pineville, KY	1002	11	12	1003.7	11
Barbourville, KY	27	11	14	38.5	12
Williamsburg, KY	21	11	15	27.5	12
Nashville, TN	40	10	13	42.2	11
Clarkeville, TN	46	10	16	52.8	12
Emory River:					
Oakdale, TN	25	11	11	26.12	11
South Chickamauga Creek:					
Chickamauga, TN	10	1	2	11.34	1
		3	5	12.53	3
		9	12	11.50	11
Elk:					
Fayetteville, TN	661	10	12	665.57	11
Duck:					
Shelbyville, TN	722	10	12	730.5	11
Columbia, TN	32	11	14	42.95	12
Tennessee:					
Whitesburg, AL	560	Dec 26	Feb 13	568.76	Dec 28
				568.64	13
Florence, AL	419	Dec 27	20	426.26	11
Savannah, TN	380	10	21	389.00	14
		29	31	381.32	30
Gilbertville, KY	320	Dec 27	Feb 14	337.92	16
Ohio:					
Racine, WV	38	12	13	39.5	13
Point Pleasant, WV	40	12	14	42.13	13
Huntington, WV	50	13	13	50.1	13
Ashland, KY	52	U	U	54.14	13
Greenup Dam, KY	54	U	U	55.00	13
Portsmouth, OH	50	13	14	51.56	13
Mayesville, KY	50	13	15	#51.67	14
Meldahl Dam, OH (Lower)	51	14	15	51.5	14
McAlpine Dam, KY	23	14	17	26.15	16
Louisville, KY	55	15	17	57.7	16
Cannelton Dam, IN	42	15	19	45.7	17

River and station	Flood stage	Above flood stages -dates		Crest	
		From-	To-	Stage	Date
<u>Ohio Basin-Continued</u>					
Ohio-Con't:					
Tell City, IN	38	13	20	#44.3	17
Owensboro, KY (Dam 46)	41	15	19	#43.1	17
Newburgh, IN (Dam 47)	38	12	Feb 3	#45.8	18
Evansville, IN	42	16	19	42.66	18
Cypress, IN (Dam 48)	38	13	Feb 3	44.8	18
Mt. Vernon, IN	35	2	10	#36.1	4
		13	Feb 5	#42.5	19
Dam 49, KY	37	3	10	#38.0	6
		14	Feb 6	#44.1	20
Shavneetown, IL	33	1	Feb 9	44.5	20
Dam 50, KY	34	Dec 31	Feb 10	#48.0	21
				#44.6	Feb 5
Cairo, IL	40	Dec 28	Feb 15	52.19	Feb 1
<u>White Basin</u>					
Cache:					
Patterson, AR	7	Nov 26	1/	A 9.4	12
Black:					
Pocahontas, AR	17	Dec 29	3	17.82	Dec 31
Black Rock, AR	14	Nov 24	15	25.9	Dec 5
		21	Feb 9	18.4	27
White:					
Georgetown, AR	21	29	Feb 8	21.4	31
Clarendon, AR	26	Dec 1	1/	A27.7	15
St. Charles, AR	25	Dec 5	1/	27.5	Feb 9
<u>Arkansas Basin</u>					
Neosho:					
Oswego, KS	17	20	20	17.25	20
Fourche La Pave:					
Houston, AR	25	11	12	26.0	11
<u>Red Basin</u>					
Sulphur:					
Hagensport, TX	44	10	13	47.05	11
		19	22	47.20	19
Naples, TX	22	U	2	24.53	1
		14	Feb 6	27.43	15
Ouachita:					
Camden, AR	26	12	20	32.9	15
		23	23	26.2	23
		30	1/	26.8	Feb 1
Monroe, LA	40	13	1/	45.2	30-31
Columbia Lock and Dam, LA	65	25	1/	67.0	Feb 2-3
Black:					
Jonesville L and D, LA	52	24	1/	53.6	Feb 6-8
Acme, LA	48	26	Feb 28	50.1	Feb 4-8
<u>Lower Mississippi Basin</u>					
St. Francis:					
Fisk, MO	20	Dec 9	6	24.87	Dec 16
		24	29	21.26	25
St. Francis, AR	18	Dec 4	14	21.69	Dec 27
		16	16	18.13	16
		24	Feb 3	19.87	29
Tallahatchie:					
Swan Lake, MS	26	Dec 27	1/	30.25	15
Yazoo:					
Greenwood, MS	35	24	1/	36.28	29
Yazoo City, MS	29	Dec 25	1/	A34.36	Feb 16
Big Black:					
West, MS	12	Dec 25	1/	20.70	29
Bovina, MS	28	Dec 26	Feb 14	38.55	11
Mississippi:					
New Madrid, MO	34	12	Feb 14	40.5	Feb 1
Caruthersville, MO	32	10	Feb 15	39.3	Feb 2-5
Memphis, TN	34	26	Feb 13	36.4	Feb 6
Vicksburg, MS	43	28	Feb 21	45.4	Feb 10
Natchez, MS	48	25	Feb 24	50.9	Feb 10
Red River Landing, LA	45	18	1/	50.2	Feb 17
Baton Rouge, LA	35	23	Feb 27	39.0	Feb 15
Donaldsonville, LA	28	26	Feb 26	30.7	Feb 16
<u>Atchafalaya Basin</u>					
Atchafalaya:					
Morgan City, LA	7	Dec 13	1/	A 9.3	Feb 19
<u>WEST GULF OF MEXICO DRAINAGE</u>					
Mormontau:					
Mormontau, LA	5	5	9	5.6	7
		20	Feb 11	7.7	28

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River and station	Flood stage	Above flood stages -dates		Crest		River and station	Flood stage	Above flood stages -dates		Crest	
		From-	To-	Stage	Date			From-	To-	Stage	Date
				ft						ft	
WEST GULF OF MEXICO DRAINAGE Continued						PACIFIC SLOPE DRAINAGE-Continued					
West Fork Calcasieu:						Roque-Con't:					
Sam Houston Park, LA	5	21	22	5.5	21	Grants Pass, OR	19	15	17	25.88	16
		27	28	5.3	28	South Fork Coquille:					
Calcasieu:						Myrtle Point, OR	35	14	18	43.84	15
Mineston, LA	12	Dec 21	1	15.4	Dec 27	Coquille:					
		18	4	15.7	7	Coquille, OR	21	15	19	23.9	16
		19	Feb 4	16.8	22	Cow Creek:					
Oakdale, LA	12	23	24	12.9	23	Riddle, OR	18	15	17	27.89	15
		29	30	12.7	29	South Umpqua:					
Kinder, LA	16	13	15	16.8	14	Tiller, OR	15	15	17	18.34	15
		21	Feb 4	18.8	22	Winston, OR	26	15	17	32.64	16
Lake Charles, LA	6	8	9	3.1	8	Roseburg, OR	22	15	17	30.50	16
		20	30	4.1	28	Umpqua:					
Lake Fork:						Elkton, OR	33	U	U	44.20	16
Quitman, TX (near)	16	22	22	16.03	22	Siuslaw:					
Sabine:						Mapleton, OR	18	14	18	28.06	16
Emory, TX	12	10	30	14.32	11	Aleza:					
				13.87	20	Tidewater, OR	18	14	18	24.54	16
Mineola, TX	14	13	Feb 5	17.39	22	Siletz:					
Gladewater, TX	26	19	Feb 6	31.61	29	Siletz, OR	16	16	17	19.12	16
Longview, TX	25	21	Feb 9	29.24	30	Wilson:					
Logansport, TX	28	24	Feb 4	31.35	28	Tillamook, OR	11	14	17	115.75	16
Bon Weir, TX	17	U	1	23.57	30	Nehalem:					
Deweyville, TX	14	Dec 7	Feb 28	17.72	Feb 1	Foss, OR	13	14	19	20.98	16
Attoyac Bayou:						<u>Columbia Basin</u>					
Chireno, TX (near)	14	7	Feb 5	20.65	25	St. Joe:					
Angelina:						St. Maries, ID	38	16	19	41.4	16
Lufkin, TX (near)	8	U	B	13.36	29	Coeur D'Alene:					
Neches:						Ehaville, ID	72	16	19	81.3	16
Alto, TX (near)	16	4	Feb 5	18.07	5	Cataldo, ID	43	16	19	49.9	16
		24	Feb 10	18.60	29	Coeur D'Alene Lake:					
Diboll, TX (near)	10	Oct 13	1	115.43	27	Coeur D'Alene, ID	35	19	23	36.54	20
Rockland, TX (near)	22	21	22	22.38	21	Hangman Creek:					
		27	Feb 2	24.94	29	Spokane, WA	11	15	16	12.8	15
Weiss Bluff, TX	15	19	Feb 7	16.9	22	Spokane:					
Lawsons Crossing, TX	4	18	Feb 10	8.4	23	Spokane, WA	27	18	27	28.9	20
East Fork Trinity:						Yakima:					
Crandall, TX	13	27	30	13.58	27	Parker, WA	10	15	18	113.6	16
Trinity:						Kiona, WA	20,000	16	21	39,300	17
Trinidad, TX	28	13	15	31.65	14	c.f.s.					
Goodrich, TX	36	24	30	39.28	28	Weuser:					
Liberty, TX	24	20	Feb 6	28.5	30-31	Cambridge, ID	9	16	17	9.55	17
Moss Bluff, TX	4	Dec 22	14	6.75	Dec 31	Weiser, ID	8	5	19	10.4	12
Navasota:						Snake:					
Easterly, TX (near)	14	U	31	15.6	27	Weiser, ID	12	13	15	14.3	14
Bryan, TX (near)	12	20	Feb 4	13.95	27	Klickitat:					
Guadalupe:						Pitt, WA	16	U	U	17.19	16
Victoria, TX	21	27	31	22.59	29	Marys:					
Dupont, TX	20	14	17	21.6	15-16	Philomath, OR	20	15	17	20.9	15
		19	Feb 5	25.3	30	Santiam:					
PACIFIC SLOPE DRAINAGE						Jefferson, OR	15	15	17	19.5	16
Cache Creek:						Luckiamute:					
Rumsey, CA	14	16	16	14.4	16	Suver, OR	27	15	18	30.6	17
Sacramento:						S. Yamhill:					
Bend Bridge, CA	38	16	17	43.5	17	Whiteson, OR	38	15	20	45.04	16
Red Bluff, CA	23	16	17	U	17	Molalla:					
Tehama, CA	213	15	U	220.0	16-17	Canby, OR	13	15	16	14.4	15
Vina Woodson Bridge, CA	183	15	U	190.3	16	Pudding:					
Russian:						Aurora, OR	20	15	25	28.3	16
Hopland, CA	21	16	16	25.3	16	Tualatin:					
Healdsburg, CA	19	16	17	24.5	16	Oswego, OR	20	17	22	25.63	18
Summer Home, CA	32	16	18	43.5	17	Farmington, OR	29	15	24	35.14	17
Guernville B, CA	32	16	18	40.7	17	West Linn, OR	12	17	22	16.31	18
Van Duzen:						Clackamas:					
Bridgeville, CA	17	15	16	20.34	16	Clackamas, OR	13	15	16	17.6	15
South Fork Bel:						Johnson Creek:					
Miranda, CA	33	16	16	34.52	16	Sycamore, OR	8	15	16	12.72	15
Bel:						Willamette:					
Scotia, CA	51	16	16	52.31	16	Harrisburg, OR	12	16	18	12.7	16
Fernbridge, CA	20	15	17	26.33	16	Corvallis, OR	20	16	17	22.1	17
Klamath:						Albany, OR	25	16	18	28.58	17
Klamath Glen, CA	40	16	17	41.96	16	Sales, OR	28	16	18	32.2	17
Applegate:						Oregon City UPRO, OR	14	16	20	17.1	18
Applegate, OR	13	15	17	20.41	15	Oregon City LWRO, OR	27	15	22	38.3	18
Roque:											
Eagle Point, OR	10	15	16	11.84	15						
Raygold, OR	12	15	17	15.06	16						

FLOOD STAGE DATA

(All dates in January unless otherwise specified)

JANUARY 1974

River and station	Flood stage	Above flood stages -dates		Crest	
		From--	To--	Stage	Date
<u>Columbia Basin-Continued</u>	<u>Ft.</u>			<u>Ft.</u>	
Willamette-Con't Portland, OR	18	16	22	24.1	18
Columbia:					
Vancouver, WA	16	15	25	23.2	18
Columbia City, OR	17	16	21	19.6	19
Chehalis:					
Centralia, WA	63	15	19	69.1	16
Skykomish:					
Goldbar, WA	15	15	16	15.56	15

River and station	Flood stage	Above flood stages -dates		Crest	
		From--	To--	Stage	Date
<u>Columbia Basin-Continued</u>	<u>Ft.</u>			<u>Ft.</u>	
Snoqualmie:					
Carnation, WA	54	15	17	56.7	16
Snohomish:					
Snohomish, WA	25	15	18	30.40 30.38	16 17
Skagit:					
Concrete, WA	29	16	17	30.75	16
Mount Vernon, WA	28	16	17	29.64	16

A See previous report for Additional crest information.
 N Did not crest during current month.
 B Above flood stage entire month.

RAWINSONDE DATA

Average monthly values

JANUARY 1974

Standard pressure surface (mb)	GRAND JUNCTIONS, COLO. 854 MB										GREAT FALLS, MONT. 884 MB										GREEN BAY, WIS. 992 MB										GREENSBORO, N. C. 988 MB										GUADALUPE IS., MEXICO 1016 MB									
	Resultant Wind					No. of observations	Resultant Wind					No. of observations	Resultant Wind					No. of observations	Resultant Wind					No. of observations	Resultant Wind					No. of observations																				
	Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed	Dynamic height	Temperature	Dew Point	Direction	Speed										
	↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.	↑	↑	↑	M.p.h.											
SURFACE	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
1000	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
950	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
900	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
850	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
800	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
750	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
700	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
650	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
600	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
550	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
500	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
450	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
400	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
350	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
300	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
250	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
200	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
150	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		
100	31	1,472	-10.3	-12.9	13	6	31	1,118	-8.6	-12.8	29	5	0	21	210	-9.2	-12.0	26	2	0	31	275	5.4	3.9	21	4	31	23	13.6	10.2	34	2.9																		

* GUAM, MARIANA IS. 997 MB										* HILO, HAWAII 1011 MB										* HUNTINGTON W. VA. 990 MB										* INTERNATIONAL FALLS, MINN. 972 MB										* JACKSON MISS. 1008 MB									
Resultant Wind					No. of observations	Resultant Wind					No. of observations	Resultant Wind					No. of observations	Resultant Wind					No. of observations	Resultant Wind					No. of observations																				
Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed		Dynamic height	Temperature	Dew Point	Direction	Speed	Dynamic height	Temperature	Dew Point	Direction	Speed										
↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.		↑	↑	↑	↑	M.p.h.	↑	↑	↑	M.p.h.											
SURFACE	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
1000	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
950	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
900	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
850	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
800	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
750	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
700	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
650	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
600	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
550	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
500	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
450	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
400	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
350	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
300	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
250	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0	31	246	3.9	1.6	23	8	31	359	-20.1	-24.8	23	7	31	100	10.3	8.5	17	4																			
200	31	111	23.8	21.3	06	2	31	20.3	17.3	21	1	0																																					

RAWINSONDE DATA

Average monthly values

JANUARY 1974

Table with columns for station names (NORTH PLATTE, NEBR., OAKLAND, CALIF., OMAHA, NEBR., PAGO PAGO, AMERICAN SAMOA, PEORIA, ILL.) and various meteorological data points like surface pressure, dynamic height, temperature, dew point, and wind speed.

Table with columns for station names (PITTSBURGH, PA., PONAPE, CAROLINE IS., PORTLAND, MAINE, OUILLYUTE, WASH., RAPID CITY, S. DAK.) and various meteorological data points.

Table with columns for station names (ST CLOUD, MINN., ST PAUL IS., ALASKA, SALEM, ILL., SALEM, OREG., SALT LAKE CITY, UTAH) and various meteorological data points.

RAWINSONDE DATA

Average monthly values

JANUARY 1974

Standard pressure surface (mb.)	WAYCROSS, GA. 1016 MB						WINNEBUCA, NEV. 870 MB						WINSLOW, ARIZ. 892 MB						YAKUTAT, ALASKA 1010 MB						YAP, CAROLINE IS. 1007 MB					
	Dynamic height		Temperature	Dew Point	Resultant Wind		Dynamic height		Temperature	Dew Point	Resultant Wind		Dynamic height		Temperature	Dew Point	Resultant Wind		Dynamic height		Temperature	Dew Point	Resultant Wind							
	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.						
SURFACE 31	44	14.4	13.3	22	4	21	1.312	-4.1	-9.6	17	1.3	31	1.487	-3.4	-6.0	22	4	20	12	-9.1	08	1.8	31	14	27.1	23.7	08	2.4		
1000 31	174	16.3	14.6	22	2.1																									
950 31	612	16.0	12.6	22	4.2																									
900 31	1.071	13.9	8.7	23	8.5	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
850 31	2.057	9.3	4.2	23	8.5	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
800 31	2.590	5.7	-6.0	23	8.5	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
750 31	3.123	3.6	-10.1	23	8.5	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
700 31	3.656	1.4	-14.4	23	10.8	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
650 31	4.189	-0.8	-18.6	23	12.4	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
600 31	4.722	-3.1	-22.8	23	14.0	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
550 31	5.255	-7.4	-27.0	23	15.6	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
500 31	5.788	-11.7	-31.2	23	17.2	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
450 31	6.321	-16.0	-35.4	23	18.8	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
400 31	6.854	-20.3	-39.6	23	20.4	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
350 31	7.387	-24.6	-43.8	23	22.0	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
300 31	7.920	-28.9	-48.0	23	23.6	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
250 31	8.453	-33.2	-52.2	23	25.2	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
200 31	8.986	-37.5	-56.4	23	26.8	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
150 31	9.519	-41.8	-60.6	23	28.4	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
100 31	10.052	-46.1	-64.8	23	30.0	31	1.500	-1.3	-7.4	19	3.2	20	1.541	-3.3	-6.2	31	2	30	1.306	-7.6	-14.6	10	1.4	31	1.491	17.3	16.7	11	2.7	
80 24	11.241	-57.9	-78.9	24	30.3	27	11.745	-38.4	-29	29.7	31	11.867	-38.1	-28	28.1	28	11.377	-38.7	-30	27.0	31	12.013	-39.7	-30	27.0	31	12.013	-39.7	-30	
75 24	12.981	-39.2	-26	29	25.8	31	12.707	-36.5	-29	25.8	31	12.707	-36.5	-29	25.8	31	12.707	-36.5	-29	25.8	31	12.707	-36.5	-29	25.8	31	12.707	-36.5	-29	
150 31	13.941	-61.6	-26	29	25.8	31	13.951	-38.5	-29	25.8	31	13.951	-38.5	-29	25.8	31	13.951	-38.5	-29	25.8	31	13.951	-38.5	-29	25.8	31	13.951	-38.5	-29	
125 31	15.058	-66.9	-26	29	25.8	31	15.068	-40.8	-29	25.8	31	15.068	-40.8	-29	25.8	31	15.068	-40.8	-29	25.8	31	15.068	-40.8	-29	25.8	31	15.068	-40.8	-29	
100 31	16.392	-70.8	-26	29	25.8	31	16.402	-42.7	-30	25.8	31	16.402	-42.7	-30	25.8	31	16.402	-42.7	-30	25.8	31	16.402	-42.7	-30	25.8	31	16.402	-42.7	-30	
80 24	17.706	-72.4	-26	29	25.8	31	17.716	-44.6	-30	25.8	31	17.716	-44.6	-30	25.8	31	17.716	-44.6	-30	25.8	31	17.716	-44.6	-30	25.8	31	17.716	-44.6	-30	
70 24	18.491	-71.9	-26	29	25.8	31	18.501	-46.5	-30	25.8	31	18.501	-46.5	-30	25.8	31	18.501	-46.5	-30	25.8	31	18.501	-46.5	-30	25.8	31	18.501	-46.5	-30	
60 24	19.405	-69.1	-26	29	25.8	31	19.415	-48.4	-30	25.8	31	19.415	-48.4	-30	25.8	31	19.415	-48.4	-30	25.8	31	19.415	-48.4	-30	25.8	31	19.415	-48.4	-30	
50 24	20.308	-64.3	-26	29	25.8	31	20.318	-50.3	-30	25.8	31	20.318	-50.3	-30	25.8	31	20.318	-50.3	-30	25.8	31	20.318	-50.3	-30	25.8	31	20.318	-50.3	-30	
40 24	21.211	-57.6	-27	27	9.3	15	21.781	-37.6	-32	6.9	22	21.805	-39.9	-38	5.8	21	21.678	-35.1	-31	2.4	28	21.952	-30.9	-32	1.0					
30 24	22.114	-49.0	-27	27	9.3	15	22.624	-36.1	-35	7.1	17	23.617	-37.8	-31	6.1	17	23.566	-34.8	-32	2.3	27	23.762	-36.7	-30	10	10.0				
20 24	23.017	-39.6	-26	26	6.2	9	24.779	-35.8	-32	6.6	16	24.768	-36.9	-30	7.0	14	24.715	-35.2	-32	2.6	27	24.922	-35.1	-30	10	16.1				
15 23	23.920	-24.7	-26	26	6.2	9	26.206	-34.8	-37	6.4	16	26.191	-34.0	-28	9.0	9	26.201	-33.9	-29	2.9	25	26.356	-32.2	-29	09	21.0				
10 13	30.913	-44.8	-24	24	10.9	9	28.086	-31.9																						
7	33.305	-42.4																												

YUCCA FLAT, NEV. 882 MB																									
Standard pressure surface (mb.)	Dynamic height		Temperature	Dew Point	Resultant Wind		Dynamic height		Temperature	Dew Point	Resultant Wind		Dynamic height		Temperature	Dew Point	Resultant Wind		Dynamic height		Temperature	Dew Point	Resultant Wind		
No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.	No. of observations	Direction	Speed	M.p.s.		
SURFACE 31	1.198	-4.6	-6.6	31	1.1																				
1000 31																									
950 31																									
900 31																									
850 31	1.494	-.5	-4.6	33	1.6																				
800 31	1.980	-1.0	-7.1	23	1.9																				
750 31	2.464	-2.4	-11.0	26	3.3																				
700 31	3.040	-4.4	-16.1	27	5.7																				
650 31	3.621	-7.3	-18.1	28	7.9																				
600 31	4.240	-11.0	-21.3	28	9.8																				
550 31	4.904	-14.9	-24.7	29	1																				

SOLAR RADIATION INTENSITIES

Tabulated in langley's per minute on a surface normal to the direction of the sun.

JANUARY 1974

Date	Sun's zenith distance									
	A. M.					*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°	
ALBUQUERQUE, NM										
Air mass										
	4.19	3.35	2.51	1.67	*	1.67	2.51	3.35	4.19	
4-----	---	---	---	---	---	---	---	---	---	---
5-----	---	---	---	1.29	1.32	1.32	.97	.84	---	---
10-----	---	---	---	(1.39)	---	(1.45)	1.32	1.20	1.11	---
11-----	1.11	1.20	1.33	1.44	1.43	1.43	1.30	1.20	(1.09)	---
12-----	1.10	1.18	1.26	---	1.44	1.39	1.21	1.12	---	---
13-----	---	---	---	1.38	1.43	---	---	---	---	---
14-----	(1.01)	(0.98)	(1.22)	(1.34)	(1.37)	1.43	1.31	1.20	1.11	---
15-----	1.13	1.24	1.34	1.47	1.50	1.48	1.34	1.24	1.14	---
16-----	1.12	1.21	1.31	1.45	1.48	1.44	1.27	1.18	1.09	---
17-----	---	1.17	(1.26)	---	1.42	---	---	---	---	---
18-----	1.04	(1.14)	(1.24)	1.38	1.42	1.38	1.24	1.12	1.05	---
20-----	1.06	1.16	1.27	1.39	---	---	---	---	---	---
22-----	1.05	1.17	1.27	1.45	1.47	1.44	1.29	1.18	1.07	---
23-----	1.09	1.19	1.30	1.44	1.51	---	---	---	---	---
24-----	.99	1.08	1.26	1.41	1.46	1.41	1.27	1.18	1.05	---
25-----	1.09	1.18	1.31	1.44	1.49	1.46	1.29	1.17	1.06	---
26-----	---	---	1.22	---	---	---	---	---	---	---
27-----	---	---	---	---	---	---	1.28	1.18	1.08	---
28-----	1.10	---	(1.30)	---	---	---	---	---	---	---
29-----	1.04	1.17	1.26	1.43	1.48	1.43	1.27	1.18	1.10	---
30-----	1.07	(1.13)	---	(1.42)	1.47	1.40	1.28	1.18	1.06	---
31-----	1.09	1.20	1.30	1.44	1.52	1.42	1.28	1.18	1.07	---
Aver- ages	1.08	1.18	1.29	1.41	1.46	1.42	1.26	1.15	1.08	

Date	Sun's zenith distance									
	A. M.					*	P. M.			
	78.7°	75.7°	70.7°	60.0°		60.0°	70.7°	75.7°	78.7°	
TUCSON, AZ										
Air mass										
	4.56	3.65	2.74	1.83	*	1.83	2.74	3.65	4.56	
1-----	.94	---	---	1.18	---	1.38	---	---	---	---
3-----	.91	1.02	---	1.14	1.34	1.42	---	1.13	.97	.84
4-----	---	---	---	1.20	1.37	---	---	---	---	---
5-----	---	---	---	---	---	1.40	---	1.25	---	---
6-----	---	---	---	---	---	---	---	---	---	---
8-----	1.02	1.11	1.24	1.44	1.42	1.39	---	---	1.14	1.03
10-----	.90	1.01	1.14	1.29	1.32	1.33	---	---	1.09	1.01
11-----	.96	1.08	1.24	---	---	---	---	---	---	---
12-----	1.04	1.14	1.23	1.38	1.40	1.34	1.13	1.04	.92	---
13-----	.95	1.05	1.18	1.33	1.36	1.34	1.26	1.03	.91	---
14-----	.90	1.01	1.15	1.33	1.39	1.38	1.23	1.08	1.00	---
15-----	1.00	1.10	1.20	1.37	1.46	1.39	1.22	1.08	.97	---
16-----	.99	1.09	1.25	1.39	1.46	1.37	1.17	1.05	.97	---
17-----	---	---	1.08	---	---	---	---	---	---	---
18-----	.84	.91	1.04	1.20	1.40	1.31	---	---	1.01	.87
19-----	---	1.05	1.17	1.33	1.38	1.24	1.15	1.05	.93	---
20-----	---	---	---	---	---	---	1.20	1.05	.90	---
21-----	---	---	---	---	---	---	---	---	.96	---
22-----	1.00	1.10	1.26	1.38	1.43	1.38	1.23	1.13	1.03	---
23-----	---	---	---	---	---	1.36	1.28	1.06	.95	---
24-----	.92	1.03	1.14	1.32	1.40	1.31	1.10	.94	.84	---
25-----	.99	1.09	1.21	1.38	1.45	1.35	1.24	1.12	1.02	---
26-----	.99	1.09	1.20	1.36	1.43	1.37	1.25	1.08	.97	---
27-----	---	---	---	1.29	1.39	1.37	1.19	1.06	.96	---
28-----	.93	1.06	1.22	1.37	1.49	1.38	1.27	1.15	1.06	---
29-----	1.01	1.09	1.21	1.39	1.49	---	1.26	---	---	---
30-----	1.05	1.12	1.23	1.41	1.50	1.39	---	---	1.03	---
31-----	.89	1.08	1.21	1.40	1.49	1.43	1.21	1.05	.95	---
Aver- ages	.96	1.06	1.19	1.35	1.42	1.36	1.20	1.08	.96	

MADISON, WI										
Air mass										
	4.69	3.75	2.81	1.88	*	1.88	2.81	3.75	4.69	
1-----	S 1.06	S 1.15	S 1.27	---	S 1.32	---	S 1.29	S 1.14	S 1.04	---
4-----	S 1.01	S 1.11	S 1.24	---	S 1.31	---	S 1.21	S 1.05	S .93	---
7-----	S 1.00	S 1.10	S 1.25	---	S 1.34	---	S 1.24	S 1.11	S 1.01	---
11-----	S .83	S .91	---	---	---	---	S 1.28	S 1.11	S 1.01	---
12-----	S 1.05	S 1.12	S 1.23	---	S 1.34	---	---	---	---	---
24-----	---	---	---	---	---	---	---	M .33	M .18	---
25-----	M .66	M .73	---	---	---	---	---	---	---	---
31-----	S 1.01	S 1.09	S 1.20	---	S 1.34	---	S 1.21	S 1.10	S 1.00	---
Aver- ages	.94	1.03	1.23	---	1.33	---	1.24	.97	.85	

MAUNA LOA OBSERVATORY, HI										
Air mass										
	3.36	2.69	2.01	1.34	*	1.34	2.01	2.69	3.36	
1-----	1.17	1.27	1.38	1.49	---	---	---	---	---	---
2-----	1.19	1.27	1.37	1.50	---	---	---	---	---	---
3-----	1.19	1.27	1.38	1.48	---	---	---	---	---	---
6-----	---	---	---	1.47	---	---	---	---	---	---
12-----	---	---	---	---	1.57	1.48	1.37	1.28	1.20	1.07
15-----	---	---	---	---	---	1.45	1.30	1.18	1.07	1.08
16-----	1.20	1.28	1.36	1.47	1.57	1.45	1.33	1.22	1.12	---
17-----	1.20	1.29	1.37	1.48	---	---	---	---	---	---
18-----	1.20	1.28	1.37	1.48	---	---	---	---	---	---
19-----	1.21	1.28	1.37	1.48	1.55	---	---	---	---	---
21-----	1.23	1.31	1.41	1.52	---	---	---	---	---	---
22-----	1.26	1.33	1.42	1.53	1.63	---	1.40	1.30	1.22	---
23-----	---	---	---	1.50	---	---	---	---	---	---
25-----	1.26	1.33	1.42	1.53	---	---	---	---	---	---
26-----	1.23	1.30	---	1.50	---	---	---	---	---	---
27-----	1.21	1.29	1.39	1.49	---	---	---	---	---	---
29-----	---	1.27	1.37	1.49	---	---	---	---	---	---
30-----	1.21	1.29	1.39	1.49	---	---	---	---	---	---
Aver- ages	1.21	1.29	1.38	1.48	1.58	1.46	1.35	1.25	1.14	

OMAHA, NE										
Air mass										
	4.78	3.82	2.87	1.91	*	1.91	2.87	3.82	4.78	
NO DATA RECEIVED										

NET RADIATION

Net radiation in langley's per day (6 a.m. to 6 a.m.) at Palmer, Alaska.

JANUARY 1974

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langley's . . .	89	79	73	100	88	65	82	45	35	96	116	84	111	53	81	89	91	79	85	98	24	43	65	43	69	56	75	115	73	35	38	73

SOLAR ULTRA-VIOLET RADIATION DATA

Daily totals and monthly average (<3900 Å) at Ames, Iowa.

Date	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Avg.
Langley's . . .	5.97	4.99	6.58	6.58	6.09	4.51	3.41	3.04	5.36	4.14	6.33	7.19	4.99	6.82	6.94	6.09	4.75	2.68	2.19	3.16	3.16	3.77	6.89	8.28	8.16	2.43	5.11	7.55	7.55	7.31	7.80	5.54

TOTAL OZONE DATA

These provisional ozone data are obtained from measurements made with a Dobeon ozone spectrophotometer, and are applicable approximately to local apparent noon. The data are presented in the code A S P Q defined in the August 1962 WMO circular entitled "PUBLICATION OF DATA FOR METEOROLOGICAL RESEARCH, WORLD OZONE DATA."

Units: Milli-atmo-cms.

Station	Day of month																															Mean O ₃	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		

No Data Received

REFERENCE NOTES

OBSERVED EXTREMES OF TEMPERATURE AND PRECIPITATION -- BY STATES: Dates in the table apply to the period 24 hours prior to time of observation. In some cases the actual occurrence is on the calendar date preceding that shown. (See individual Climatological Data for times of observations).

- + And also on an earlier date or dates.
- D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch of water equivalent to every 10 inches of snowfall.

CLIMATOLOGICAL DATA - METRIC UNITS: Data from airport unless otherwise specified.

Precipitation data in column headed "Greatest in 24 hours" are computed on a 24-hour basis without regard to calendar day - data may include precipitation with a measurable amount from the last day of the previous month or the first day of the following month.

Wind directions under resultant direction are in tens of degrees.

Value entered in column "Fastest Mile" is the highest observed 1-minute wind speed when the direction is in tens of degrees. These stations are not equipped with a recording anemometer from which "Fastest Mile data can be evaluated.

- B Number of days maximum 21.1°C. or above for Alaskan Stations.
- Y Peak Gust.
- + And also on an earlier date or dates.
- U Indicates Urban site.
- R Indicates Rural site.
- § Station pressures apply to elevations shown in the "Elevations" table of the annual issue of this publication.

Conversion formulae to English Units are as follows:

- 1 foot = 0.3048 meters
- °F. = $9 \times ^\circ\text{C} + 32$
- 1 inch = 25.4 millimeters
- 1 mile per hour = 0.447 meters per second

HEATING DEGREE DAYS: Data from airport unless otherwise specified.

- U Indicates Urban site.
- R Indicates Rural site.

COOLING DEGREE DAYS: Data from airport unless otherwise specified.

- U Indicates Urban site.
- R Indicates Rural site.

STORM SUMMARY:

- ° Includes crop damage.
- C Crop damage.
- * No occurrence of storms or unusual weather phenomena reported.
- @ Includes heavy sleet storm.
- # Freezing drizzle and freezing rain, commonly known as glaze.
- § For breakdown of "All Others," and for detailed listing of other storms, see the Environmental Data Service, NOAA, monthly publication STORM DATA.
- ‡ No Storm Data Report received for this State.
- ◇ Report incomplete.
- † Storm damages are placed in categories varying from 1 to 9 as follows:
 - 1 Less than \$50
 - 2 \$50 to \$500
 - 3 \$500 to \$5,000
 - 4 \$5,000 to \$50,000
 - 5 \$50,000 to \$500,000
 - 6 \$500,000 to \$5 Million
 - 7 \$5 Million to \$50 Million
 - 8 \$50 Million to \$500 Million
 - 9 \$500 Million to \$5 Billion.

GENERAL SUMMARY OF NATIONAL FLOOD EVENTS:

- 1/ Flooding continued at the end of the month.
- NA Not available.

FLOOD STAGE DATA:

- # Highest Stage Observed
- 1/ Continued at end of month
- Highest Stage of Record
- E Estimated
- P Provisional (Flood Stage)
- U Unknown

RAWINSONDE DATA (Average Monthly Values):

All observations scheduled at 1200, G.C.T. Pressures shown under station names are the average monthly station pressures for the month of record, corrected to the height of the floors of the instrument shelters used for rawinsonde purposes. "Number of observations" refers to those of dynamic height only. Although the number of temperature observations at any given pressure surface is usually the same as for height, it is possible for temperature to be missing for one or more pressure surfaces of some observations. Dew Point averages are limited to those observations with temperatures warmer than -40°C. Observations of wind speed and direction are sometimes lost due to limiting angles, i.e., elevation angles less than 6° above the horizon, or any obstruction above the horizon. The temperature and wind values are based on 15 or more observations at the surface or 5 observations at a standard pressure level for temperature and 10 for wind. Dew Point data are not published for standard pressure surfaces for which less than 5 observations are available. Dew Point data are computed and expressed on the basis of vapor pressure over water. Unless otherwise indicated, they are obtained from carbon hygrometers. These average values for standard pressure surfaces were obtained by rawinsondes; dynamic height (geopotential) in units of .98 dynamic meter, temperature and dew point in degrees Celsius, and resultant winds in tens of degrees and meters per second.

- * Rawinsondes at this station were equipped with hypsometers to permit more accurate evaluations of pressure, and consequently height, at pressures lower than 50 mb. These rawinsondes were carried aloft by special high altitude balloons, in an effort to consistently reach higher altitudes.
- + Observations for these stations are scheduled at 0000 G.C.T.
- † Dew Point temperatures are based on a minimum of 5 observations. Therefore, due to the lesser number of Dew Point observations at the higher levels comparison with dry-bulb temperatures should be made with care. Dew Point temperatures replaced Relative Humidity January 1967.

REFERENCE NOTES - Continued

SOLAR RADIATION INTENSITIES: Langley is the unit used to denote one gram calorie per square centimeter. An explanation of the formula used in computing the air mass values for each station appears in the February 1957 issue, Vol. 8, No. 2, page 63, of this publication.

()	Clouds Present	DM	Moderate Dust	HM	Moderate Haze	KS	Slight Smoke
*	Values corresponding to true solar noon	DS	Slight Dust	HS	Slight Haze	M	Moderate Haze-indeter-
BD	Blowing Dust	F	Fog	I	Intense Haze-indeterminable		minable
BN	Blowing Sand	GF	Ground Fog	K	Smoke	N	Sand
D	Dust	H	Haze	KI	Intense Smoke	S	Slight Haze-indeter-
DI	Intense Dust	HI	Intense Haze	KM	Moderate Smoke		minable

NET RADIATION: The measurement is made with a CSIRO FUNK net exchange radiometer over a plot of sod. The value represents the total incoming minus the total outgoing radiation of all wave lengths.

These data are of an experimental nature and are published as received from the Palmer Exp. Station. The instrument with which they were measured has not been checked by the NOAA, National Weather Service.

SOLAR ULTRA-VIOLET RADIATION DATA: These data are from an U-V Eppley total ultra violet sensor and Speedomax H (Leeds Northrup) Recorder. This instrument has not been checked by the NOAA, National Weather Service.

TOTAL OZONE DATA: The spectrophotometer measures the total amount of ozone in the atmosphere, i.e., the amount contained in a vertical column of air extending from ground level to the top of the atmosphere in the vicinity of the station. The amount of ozone in this column (coded *P P P*) is expressed in terms of a thickness of a layer it would occupy at standard temperature and pressure, e.g., 350 milli-atmos cm ozone implies an ozone layer 0.350 centimeter thick. The code *λ s* designates the type of measurement made.

DESCRIPTION OF CHARTS

CHART I. A. NORMAL DAILY AVERAGE TEMPERATURE ($^{\circ}$ F. 1931-60) FOR MONTH. B. TEMPERATURE DEPARTURE FROM 30-YEAR MEAN ($^{\circ}$ F. 1931-60) FOR MONTH. Chart I-A is reproduced from Environmental Data Service Publication "Climatic Maps of the United States." Chart I-B is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin," a publication of Environmental Data Service.

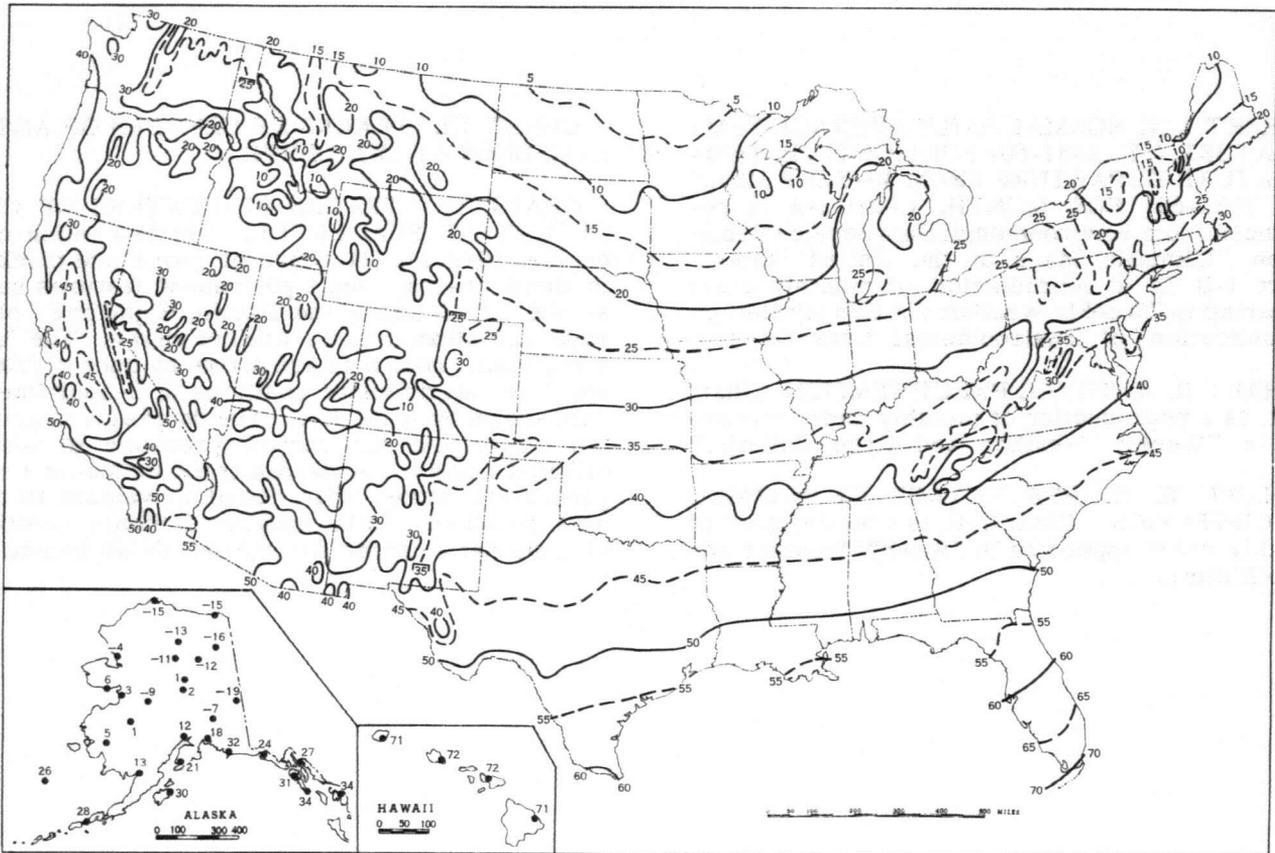
CHART II. A. TOTAL PRECIPITATION. Chart II. A. is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin."

CHART II. B. PERCENTAGE OF NORMAL PRECIPITATION. Chart II. B. is a reproduction of monthly chart appearing in "Weekly Weather and Crop Bulletin."

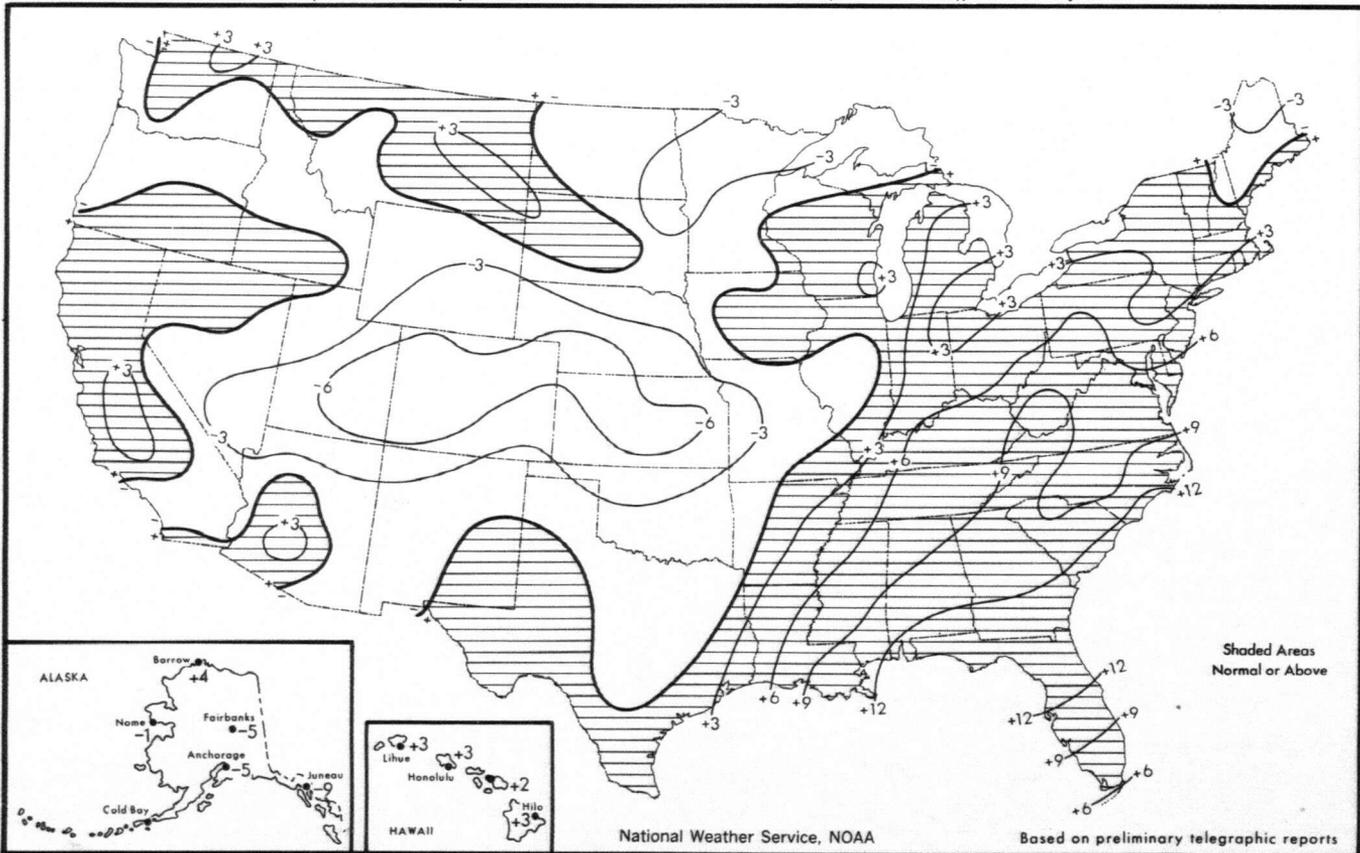
CHART III. TRACKS OF CENTERS OF ANTICYCLONES AT SEA LEVEL.

CHART IV. TRACKS OF CENTERS OF CYCLONES AT SEA LEVEL. Centers which can be identified for 24 hours or more are tracked in these charts. Semi-permanent features such as the Great Basin and Pacific Highs and Colorado and Mexico Lows are not shown. The 7:00 a.m., e.s.t., positions are shown by open circles, with the intermediate positions at 6-hour intervals shown by solid dots. The date is given above the circle and the central pressure to whole millibars below. A dashed track indicates a regeneration rather than actual movement to the next position. Solid squares indicate position of stationary center for period shown beside it.

Chart 1. A. Normal Daily Average Temperature (°F. 1941-70), January



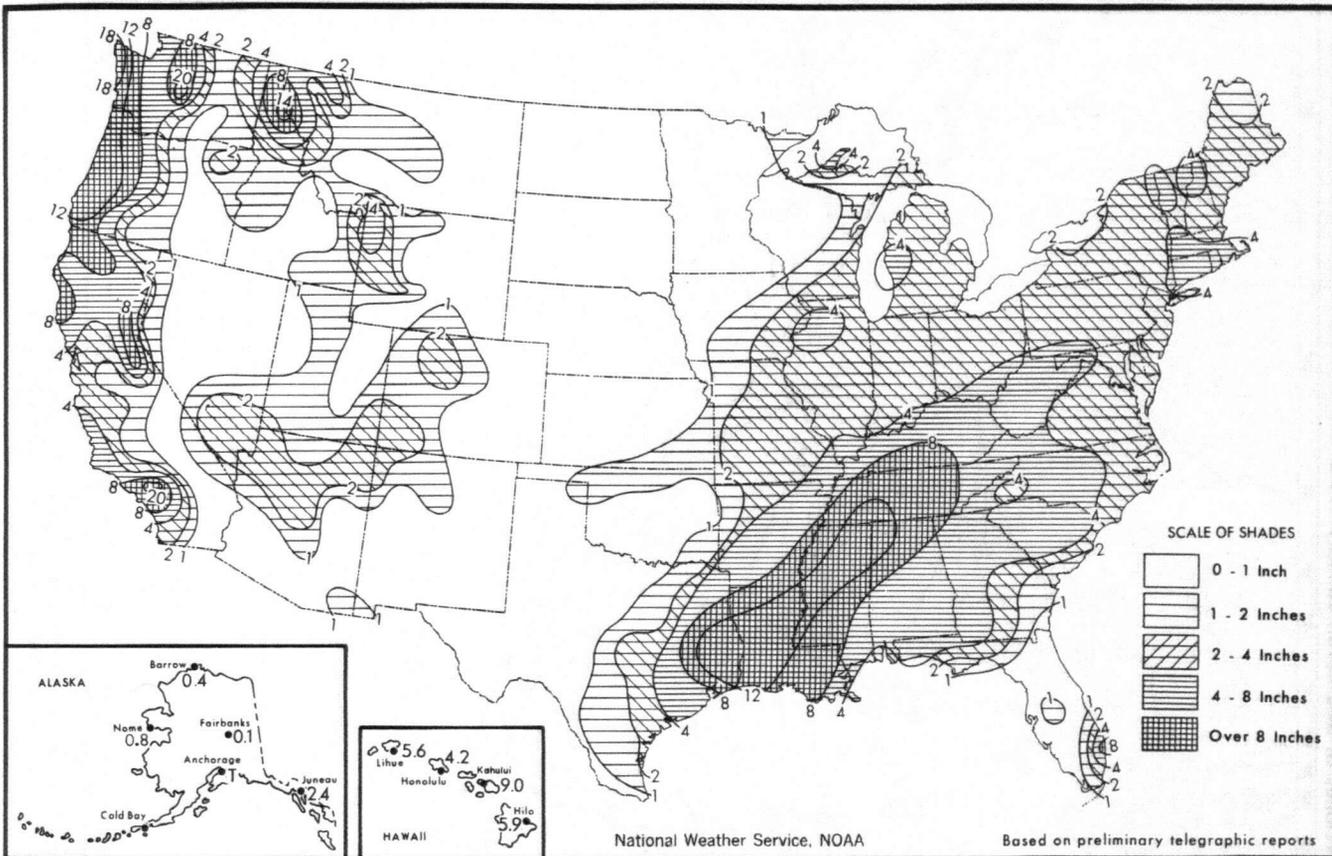
B. Temperature Departure from 30 - Year Mean (°F 1941-70), January 1974



National Weather Service, NOAA

Based on preliminary telegraphic reports

Chart II. A. Total Precipitation (Inches), January 1974



B. Percentage of Normal Precipitation, January 1974

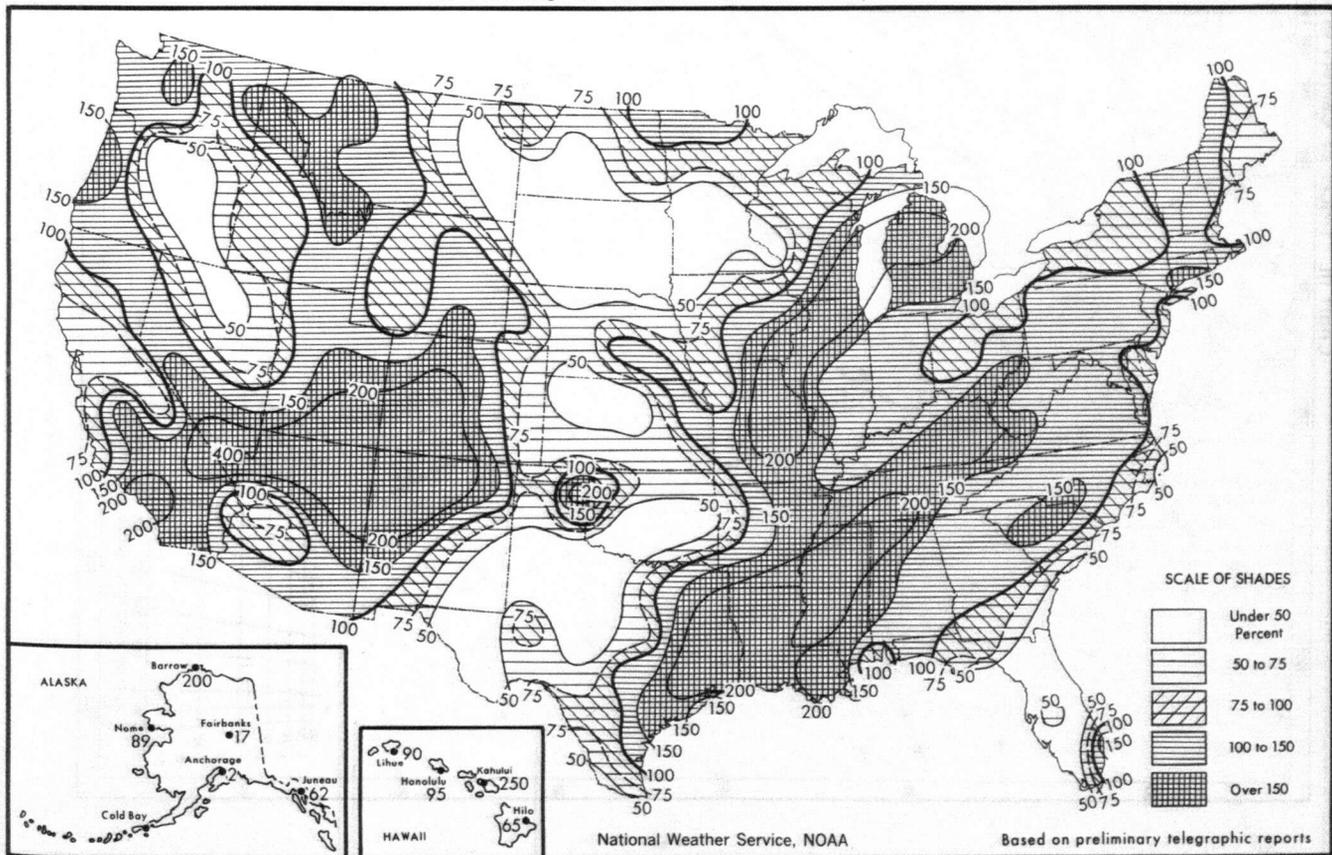
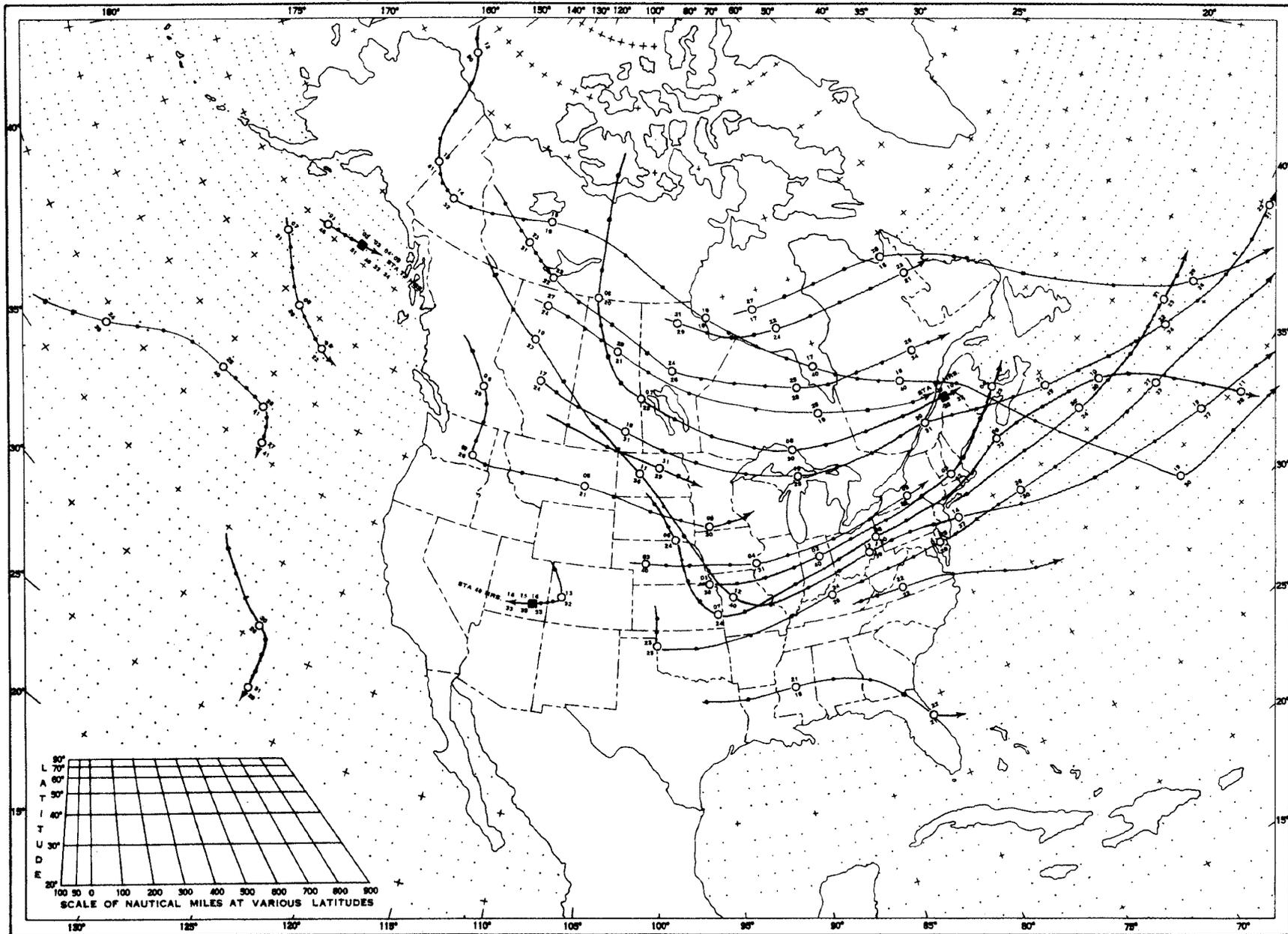
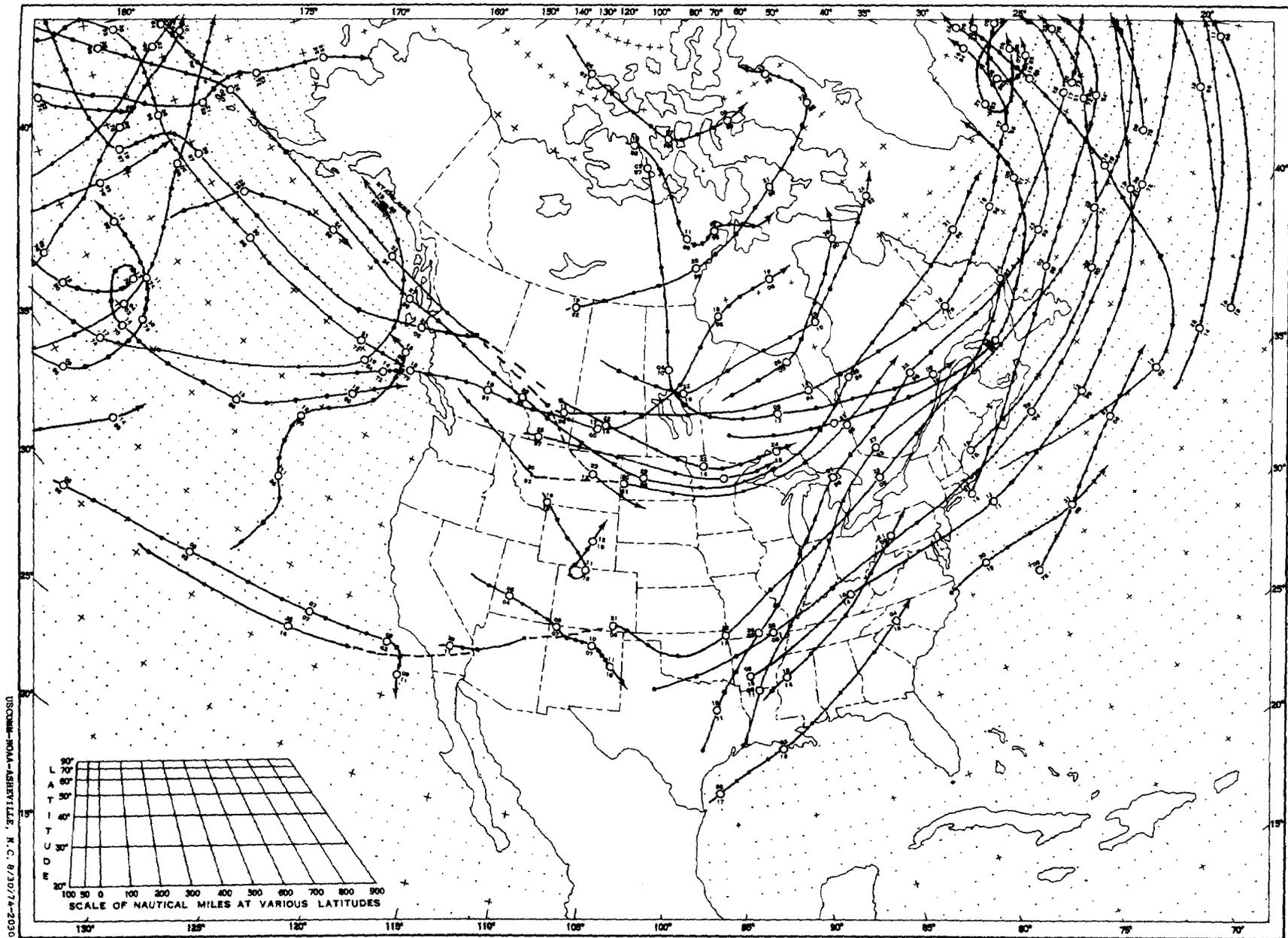


Chart III. Tracks of Centers of Anticyclones at Sea Level, January 1974



Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

Chart IV. Tracks of Centers of Cyclones at Sea Level, January 1974



Circle indicates position of center at 7:00 a.m. E.S.T. Figure above circle indicates date, figure below, pressure to nearest millibar. Dots indicate intervening 6-hourly positions. Squares indicate position of stationary center for period shown. Dashed line in track indicates reformation at new position. Only those centers which could be identified for 24 hours or more are included.

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